

10/040,647

=> d his

(FILE 'HOME' ENTERED AT 14:12:43 ON 05 JUN 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,  
LIFESCI' ENTERED AT 14:13:12 ON 05 JUN 2007

L1 39180 S SERINE (W)PROTEINASE  
L2 8415876 S CLON? OR EXPRESS? OR RECOMBINANT  
L3 13408 S L1 AND L2  
L4 7251 S HUMAN AND L3  
L5 10 S "HELA2"  
L6 7 DUP REM L5 (3 DUPLICATES REMOVED)  
L7 52 S L4 AND TESTIN?  
L8 43 DUP REM L7 (9 DUPLICATES REMOVED)  
E ANTALIS T M/AU  
L9 327 S E3-E7  
E HOOPER J D/AU  
L10 91 S E3  
L11 393 S L9 OR L10  
L12 72 S L11 AND L1  
L13 2 S L12 AND (TESTIN OR "HELA2")

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NEWS 3 JAN 16 CA/CAPLUS Company Name Thesaurus enhanced and reloaded  
NEWS 4 JAN 16 IPC version 2007.01 thesaurus available on STN  
NEWS 5 JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data  
NEWS 6 JAN 22 CA/CAPLUS updated with revised CAS roles  
NEWS 7 JAN 22 CA/CAPLUS enhanced with patent applications from India  
NEWS 8 JAN 29 PHAR reloaded with new search and display fields  
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in multiple databases  
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NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records  
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality  
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NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field  
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE  
NEWS 16 FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements  
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases  
NEWS 18 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format  
NEWS 19 MAR 16 CASREACT coverage extended  
NEWS 20 MAR 20 MARPAT now updated daily  
NEWS 21 MAR 22 LWPI reloaded  
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements  
NEWS 23 APR 02 JICST-EPLUS removed from database clusters and STN  
NEWS 24 APR 30 GENBANK reloaded and enhanced with Genome Project ID field  
NEWS 25 APR 30 CHEMCATS enhanced with 1.2 million new records  
NEWS 26 APR 30 CA/CAPLUS enhanced with 1870-1889 U.S. patent records  
NEWS 27 APR 30 INPADOC replaced by INPADOCDB on STN  
NEWS 28 MAY 01 New CAS web site launched  
NEWS 29 MAY 08 CA/CAPLUS Indian patent publication number format defined  
NEWS 30 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields  
NEWS 31 MAY 21 BIOSIS reloaded and enhanced with archival data  
NEWS 32 MAY 21 TOXCENTER enhanced with BIOSIS reload  
NEWS 33 MAY 21 CA/CAPLUS enhanced with additional kind codes for German patents  
NEWS 34 MAY 22 CA/CAPLUS enhanced with IPC reclassification in Japanese patents  
  
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.  
  
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=> file medline embase biosis biotechds scisearch hcaplus ntis lifesci		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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FULL ESTIMATED COST	0.21	0.21

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FILE 'EMBASE' ENTERED AT 14:13:12 ON 05 JUN 2007  
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FILE 'LIFESCI' ENTERED AT 14:13:12 ON 05 JUN 2007  
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=> s serine (w)proteinase  
L1 39180 SERINE (W) PROTEINASE

=> s clon? or express? or recombinant  
L2 8415876 CLON? OR EXPRESS? OR RECOMBINANT

=> s l1 and l2  
L3 13408 L1 AND L2

=> s human and l3  
L4 7251 HUMAN AND L3

=> s" HELA2"  
S" IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s "HELA2"  
L5 10 "HELA2"

=> dup rem l5  
PROCESSING COMPLETED FOR L5  
L6 7 DUP REM L5 (3 DUPLICATES REMOVED)

=> d -17 ibib ab

L6 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:1228832 HCAPLUS  
DOCUMENT NUMBER: 145:505264  
TITLE: Preparation of telomestatin analogs as antitumor agents  
INVENTOR(S): Shinke, Kazuo; Nagasawa, Kazuo; Ono, Takashi  
PATENT ASSIGNEE(S): Sosei Co., Ltd., Japan; Tokyo University of Agriculture & Technology  
SOURCE: Jpn. Kokai Tokkyo Koho, 24pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006316008	A	20061124	JP 2005-141382	20050513
PRIORITY APPLN. INFO.:			JP 2005-141382	20050513
OTHER SOURCE(S):	MARPAT 145:505264			

AB Title derivs. I [R = H, lower alkyl, aryl, allyl, aralkyl, halo, OH, C1-5 alkoxy, etc.; R1 = H, protecting group; R2 = H, lower (amino)alkyl, (protected) OH; R3 = H, protecting group; X = O, S] or their pharmacol. acceptable salts are prepared by amidation of oxazoles II (R, R1, X = same as above; R4 = C1-5 alkyl, aralkyl) with oxazoles III [R, R2 = same as above; R3', R5, R6 = H, protecting group; R5 = R6 ≠ H, R3'R5 or R3'R6 may be linked to form (un)substituted C1-5 alkylene], deprotection, intramol. cyclization, and optional deprotection. Thus, II (R = H, R1X = TBSO, R4 = Me) was amidated with III (R = H, R3' = TBS, R5 = Cbz, R2 = R6 = H), deprotected, cyclized, and deprotected to give I (R-R3 = H, X = O), which inhibited growth of Hela2.11 cells with IC50 value of 8.0 μM.

L6 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
ACCESSION NUMBER: 2003:542323 BIOSIS  
DOCUMENT NUMBER: PREV200300544975  
TITLE: Synthesis and antitumor activity of N-sulfonyl derivatives of nucleobases and sulfonamido nucleoside derivatives.  
AUTHOR(S): Zinic, B. [Reprint Author]; Krizmanic, I.; Glavas-Obrovac, Lj.; Karner, I.; Zinic, M.  
CORPORATE SOURCE: Ruder Boskovic Institute, Bijenicka 54, 10 000, Zagreb, Croatia  
bzinic@rudjer.irb.hr  
SOURCE: Nucleosides Nucleotides & Nucleic Acids, (May-August 2003) Vol. 22, No. 5-8, pp. 1623-1625. print.  
ISSN: 1525-7770 (ISSN print).  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 19 Nov 2003  
Last Updated on STN: 19 Nov 2003

AB The introduction of sulfonamido group on the C-2 position of pyrimidine nucleosides was achieved by ring opening of 2,2'- and 2,3-anhydronucleosides. N-sulfonyl derivatives of nucleobases and sulfonamido derivatives of nucleosides Were assayed for in vitro antitumor activity.

L6 ANSWER 3 OF 7 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2003:303061 BIOSIS  
 DOCUMENT NUMBER: PREV200300303061  
 TITLE: TRF1 is degraded by ubiquitin-mediated proteolysis after release from telomeres.  
 AUTHOR(S): Chang, William; Dynek, Jasmin N.; Smith, Susan [Reprint Author]  
 CORPORATE SOURCE: Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, NY, 10016, USA smithsu@saturn.med.nyu.edu  
 SOURCE: Genes & Development, (June 1 2003) Vol. 17, No. 11, pp. 1328-1333. print.  
 CODEN: GEDEEP. ISSN: 0890-9369.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 2 Jul 2003  
 Last Updated on STN: 2 Jul 2003  
 AB Mammalian telomeres are coated by the sequence-specific, DNA-binding protein, TRF1, a negative regulator of telomere length. Previous results showed that ADP-ribosylation of TRF1 by tankyrase 1 released TRF1 from telomeres and promoted telomere elongation. We now show that loss of TRF1 from telomeres results in ubiquitination and degradation of TRF1 by the proteasome and that degradation is required to keep TRF1 off telomeres. Ubiquitination of TRF1 is regulated by its telomere-binding status; only the telomere-unbound form of TRF1 is ubiquitinated. Our findings suggest a novel mechanism of sequential posttranslational modification of TRF1 (ADP-ribosylation and ubiquitination) for regulating access of telomerase to telomeres.

L6 ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2003:42593 BIOSIS  
 DOCUMENT NUMBER: PREV200300042593  
 TITLE: DNA molecules encoding human HELA2 or testisin serine proteinases.  
 AUTHOR(S): Antalis, Toni Marie [Inventor, Reprint Author]; Hooper, John David [Inventor]  
 CORPORATE SOURCE: Toowong, Australia  
 ASSIGNEE: Amrad Operations Pty., Ltd., Victoria, Australia  
 PATENT INFORMATION: US 6479274 20021112  
 SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov 12 2002) Vol. 1264, No. 2.  
<http://www.uspto.gov/web/menu/patdata.html>. e-file.  
 ISSN: 0098-1133 (ISSN print).  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 15 Jan 2003  
 Last Updated on STN: 15 Jan 2003  
 AB The present invention related generally to novel molecules and more particularly novel proteinaceous molecules involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel serine proteinases and a novel kinase and to derivatives, agonists and antagonists thereof. In one embodiment, the present invention provides a novel serine proteinase, referred to herein as "HELA2" or "testisin", which has roles in spermatogenesis, in suppressing testicular cancer and as a marker for cancers.

L6 ANSWER 5 OF 7 BIOTECHDS COPYRIGHT 2007 THE THOMSON CORP. on STN  
 DUPLICATE 1  
 ACCESSION NUMBER: 1998-10406 BIOTECHDS  
 TITLE: New serine proteases and kinase involved in regulating cell activity and viability;  
 serine protease HELA2 used to regulate cell activity and viability particularly in the testes, for promotion of sperm production, and diagnosis and

suppression of cancer, especially testicular cancer

AUTHOR: Antalis T M; Hooper J D  
PATENT ASSIGNEE: Amrad-Oper.  
LOCATION: Richmond, Victoria, Australia.  
PATENT INFO: WO 9836054 20 Aug 1998  
APPLICATION INFO: WO 1998-AU85 13 Feb 1998  
PRIORITY INFO: AU 1997-422 18 Nov 1997; AU 1997-5101 13 Feb 1997  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
OTHER SOURCE: WPI: 1998-480768 [41]

AB An isolated proteinaceous molecule (A), e.g. HELA2 (or testin), associated with regulation of cell activity or viability is claimed. (A) is a serine protease and can be amplified by the polymerase chain reaction, using the given DNA primers. (A) can also be any protein with at least 50% identity to the given protein sequences, or encoded by a nucleic acid with at least 50% similarity to the given DNA sequences. Alternatively (A) can be a kinase with a given protein and DNA sequence. Also claimed is a method of regulating cell activity or viability by contacting it with (A). The claims also cover a method of modulating mammal fertility by modulating levels of (A), increasing its levels by introduction of recombinant (A) to facilitate sperm maturation and development. Also covered is a composition containing (A), and an antibody, agonist and antagonist (antisense or ribozyme) capable of interacting with (A). The claims extend to a method of diagnosing cancer or a predisposition to cancer by determining the presence of a sequence encoding (A), as HELA2 is a suppressor of testicular cancer.  
(167pp)

L6 ANSWER 6 OF 7 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 82162946 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 6175442  
TITLE: Drug-induced biochemical markers of cancer in cervical carcinoma cells.  
AUTHOR: Ghosh N K  
SOURCE: Clinical biochemistry, (1982 Feb) Vol. 15, No. 1, pp. 28-33.  
Journal code: 0133660. ISSN: 0009-9120.  
PUB. COUNTRY: Canada  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198206  
ENTRY DATE: Entered STN: 17 Mar 1990  
Last Updated on STN: 29 Jan 1999  
Entered Medline: 14 Jun 1982

AB The elevation in the serum level of CEA in cancer patients undergoing treatment with 5-FU and other antitumor drugs has been reported. In the present study, the ectopic synthesis of multiple carcinoplacental markers has been observed to be induced (10- to 264-fold) simultaneously in the same cervical carcinoma cells (HeLa65, HeLa71 and HeLa2.2) by hydroxyurea and sodium butyrate. Among the drug-induced biochemical markers observed in HeLa cells are four sialopeptides. Regan Isoenzyme (Placental Isoenzyme of Alkaline Phosphatase), HCT-Beta, FSH-Beta, HCG-Alpha and also a steroid hormone, Progesterone. The peptide and steroid hormones were quantitated by specific radioimmunoassays (RIA), in cultured cells, media, and homogenates of tumor tissues. The induction of biochemical markers was observed also with lung carcinoma cells. That multiple polypeptides, or steroids regulated by them, are simultaneously inducible in the same cancer cells, suggest the proximity on the DNA strand of several oncofetal and oncoplacental genes derepressed by antineoplastic drugs. This fundamental study has had important clinical ramifications. The results may be used to recognize the retention by

cancer patients of occult malignancy after radiotherapy or surgery. The unsuspected metastasis may be reflected by a transient rise in the serum level of these markers during chemotherapy with anticancer drugs, which specifically inhibit DNA replication without interfering with the transcription of messenger-RNA and subsequent translation of proteins. The drug-induced protein-hormones, observed in this study, are the products of activated trophoblastic/pituitary genes in the nondividing DNA of neoplastic cells.

L6 ANSWER 7 OF 7 MEDLINE on STN DUPLICATE 3  
 ACCESSION NUMBER: 78055825 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 73243  
 TITLE: [Karyological study of the continuous cell lines.  
 Comparative analysis of the HeLa and Detroit-6 cell lines].  
 Kariologicheskoe issledovanie perevivaemykh kletochnykh  
 linii. I. Sravnitel'nyi analiz linii HeLa i Detroit-6.  
 AUTHOR: Mikhailova G R; Rodova M A; Gadashevich V N; Demidova S A;  
 Zhdanov V M  
 SOURCE: Tsitologiya, (1977 Jul) Vol. 19, No. 7, pp. 786-90.  
 Journal code: 0417363. ISSN: 0041-3771.  
 PUB. COUNTRY: USSR  
 DOCUMENT TYPE: (COMPARATIVE STUDY)  
 (ENGLISH ABSTRACT)  
 (IN VITRO)  
 Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: Russian  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 197801  
 ENTRY DATE: Entered STN: 14 Mar 1990  
 Last Updated on STN: 3 Feb 1997  
 Entered Medline: 27 Jan 1978

AB Comparison of the results of the karyologic analysis of two HeLa cell  
 sublines (HeLa1 and HeLa2), obtained from different sources, and  
 of Detroit-6 cell line has shown that all the lines contain marker  
 chromosomes characteristic of the HeLa cell line. Detroit-6 cell line  
 marker chromosomes are similar to markers of the HeLa subline (HeLa1). At  
 the same time, part of marker chromosomes in the two sublines of HeLa cell  
 line (HeLa1 and HeLa2) are different. These data show that  
 HeLa1 and Detroit-6 cell lines are more similar than two sublines of the  
 same HeLa cell line.

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 L3 13408 S L1 AND L2  
 L4 7251 S HUMAN AND L3  
 L5 10 S "HELA2"  
 L6 7 DUP REM L5 (3 DUPLICATES REMOVED)

=> s l4 and testin?

L7 52 L4 AND TESTIN?

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 43 DUP REM L7 (9 DUPLICATES REMOVED)

=> d 1-43 ibib ab

L8 ANSWER 1 OF 43 BIOTECHDS COPYRIGHT 2007 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2006-05546 BIOTECHDS

TITLE: Selecting mammal having or suspected of having tumor for treatment with erbB receptor drug, involves testing sample for expression of genes e.g. . death-associated protein kinase 1, thus predicting increased likelihood of response to drug; gene expression detection after drug administration for pharmacogenetics analysis and cancer therapy

AUTHOR: HUDSON K; SOUTH M C; MARSHALL G; SAM M

PATENT ASSIGNEE: ASTRAZENECA AB; ASTRAZENECA UK LTD

PATENT INFO: WO 2006008526 26 Jan 2006

APPLICATION INFO: WO 2005-GB2852 20 Jul 2005

PRIORITY INFO: US 2004-619027 18 Oct 2004; US 2004-590357 23 Jul 2004

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2006-118410 [12]

AB DERWENT ABSTRACT:

NOVELTY - Selecting a mammal having or suspected of having tumor for treatment with erbB receptor drug, by testing biological sample for expression of any one of genes e.g. acyl-coenzyme A oxidase 2, branched chain (ACOX2), carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7 (CHST7), death-associated protein kinase 1 (DAPK1), troponin C slow (TNNC1) as given in the patent specification, thus predicting increased response to erbB receptor drug.

DETAILED DESCRIPTION - Selecting (M1) a mammal having or suspected of having a tumor for treatment with an erbB receptor drug, involves testing a biological sample from the mammal for expression of any one of the genes e.g. acyl-coenzyme A oxidase 2, branched chain (ACOX2), apolipoprotein L1 (APOL1), CD44 antigen, carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7 (CHST7), cullin 2 (CUL2), death-associated protein kinase 1 (DAPK1), dual specificity phosphatase 4 (DUSP4), eukaryotic translation initiation factor 5A (EIF5A), hypothetical protein FLJ22028, G1 to S phase transition 2 (GSPT2), high mobility group AT-hock 2 (HMGA2), kelch-like 7 (KLHL7), laminin gamma 2 (LAMC2), metallothionein 1E (MT1E), nestin (NES), neuronal PAS domain protein 2 (NPAS2), protocadherin gamma subfamily C3 (PCDHGC3), protein kinase C gamma (PRKCA), sine oculis homeobox homolog 1 (SIX1), stanniocalcin 2 (STC2), transcription elongation factor A2 (TCEA2), troponin C slow (TNNC1), vesicle associated membrane protein 4 (VAMP4), zinc finger protein 313 (ZNF313) as given in the patent specification, thus predicting an increased likelihood of response to the erbB receptor drug.

WIDER DISCLOSURE - A kit for predicting the responsiveness of a patient or patient population with a tumor to treatment with chemotherapeutic agents, preferably erbB receptor drug, is also disclosed as new.

BIOTECHNOLOGY - Preferred Method: (M1) involves testing a biological sample from the mammal for expression of any one of NPSA2, NES, CHST7, DAPK1, ACOX2, GSTP2, TNNC1 or DAPK2, preferably (M1) involves testing a biological sample from the mammal for expression of any one, two or three of NPSA2, NES, CHST7 and/or DAPK2. (M1) additionally involves testing a biological sample from the mammal for the expression of any genes e.g. annexin A6 (ANXA6), bone marrow stromal cell antigen 2 (BST2), chromosome 9 open reading frame 16 (C9orf16), cyclin dependent kinase inhibitor 2A (CDKN2A), carcinoembryonic antigen related cell adhesion molecule 7 (CEACAM7), cathepsin B (CTSB), diaphanous homolog 2 (DIAPH2), epithelial membrane protein 1 (EMP1), epiregulin (EREG), fibroblast growth factor 2 (FGF2), homeodomain-only protein (HOP), keratin 13 (KRT13), mitogen-activated protein kinase kinase kinase 5 (MAP4K5), neuropilin 1 (NRP1), olfactomedin 1 (OLFM1), phosphoglucomutase 1 (PGM1), protease inhibitor 3 (PI3), ribonucleotide reductase M1 polypeptide



(RRM1), serine proteinase inhibitor clade E (SERPINE 1), solute carrier family 20 member 1 (SLC20A1), sprouty homolog 2 (SPRY2), tissue inhibitor of metalloproteinase 3 (TIMP3), tumor necrosis factor receptor superfamily member 6 (TNFRSF6), tumor suppressor candidate 3 (TUSC3) as given in the patent specification. The erbB receptor drug is chosen from any one of gefitinib, erlotinib, PKI-166, EKB-569, HKI-272, lapatinib, canertinib, AEE788, XL647, BMS 5599626, ceutaximab, matuzumab, pantitumumab, MR1-1, IMC-11F8 or EGFR11, preferably gefitinib.

USE - (M1) is useful for selecting a mammal having or suspected of having a tumor for treatment with an erbB receptor drug, where the tumor is chosen from leukemia, multiple myeloma, lymphoma, bile duct, bone, bladder, brain, CNS, glioblastoma, breast, colorectal, cervical, endometrial, gastric, head, neck, hepatic, lung, muscle, neuronal, oesophageal, ovarian, pancreatic, pleural membrane, peritoneal membrane, prostate, renal, skin, testicular, thyroid, uterine and vulval, preferably non-small cell lung, pancreatic, head or neck. The mammal is a human and the method involves testing a biological sample from the human for increased expression of DAPK1 and decreased expression of NPAS2, NES, CHST7 and EMP1, thus predicting an increased likelihood of response to gefitinib (all claimed). (M1) is useful in the treatment of patients with advanced tumor such as non-small cell lung carcinoma (NSCLC) or with locally advanced or metastasized NSCLC who have failed or received chemotherapy such as platinum based chemotherapy. (M1) is also useful in the adjuvant chemotherapy or as a first-line therapy.

ADVANTAGE - (M1) improves the selection of a patient having or suspected of having a tumor for treatment with erbB receptor drug.

EXAMPLE - No relevant example is given. (110 pages)

L8 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1252653 HCAPLUS

DOCUMENT NUMBER: 146:25803

TITLE: Diagnosis of thyroid carcinoma by gene expression profiling of thyroid fine needle aspirates

INVENTOR(S): Jiang, Yuqiu; Backus, John W.; Mazumder, Abhijit; Chowdary, Dondapati; Yang, Fei; Wang, Yixin; Jatkoe, Timothy

PATENT ASSIGNEE(S): Veridex, LLC, USA

SOURCE: PCT Int. Appl., 173pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006127537	A2	20061130	WO 2006-US19615	20060518
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 2007037186	A1	20070215	US 2006-435266	20060516
PRIORITY APPLN. INFO.:			US 2005-683173P	P 20050520

AB The present invention relates to methods, compns. and articles directed to diagnosing thyroid carcinoma, differentiating between thyroid carcinoma and benign thyroid diseases, testing indeterminate thyroid fine needle aspirate samples of thyroid nodules, and determining patient protocols and outcomes. A method of diagnosing thyroid carcinoma and differentiating it from benign thyroid diseases by gene expression profiling of biopsies taken by fine needle aspiration is described. Panels of informative genes and suitable probes are described.

L8 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1158006 HCAPLUS

DOCUMENT NUMBER: 145:468610

TITLE: Methods and compositions for modulating WNT signaling pathway

INVENTOR(S): Zhang, Qisheng; Ding, Sheng; Schultz, Peter G.

PATENT ASSIGNEE(S): Irm LLC, Bermuda; The Scripps Research Institute

SOURCE: PCT Int. Appl., 46pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006116503	A2	20061102	WO 2006-US15821	20060426
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: US 2005-675301P P 20050426

AB This invention provides novel Wnt signaling pathway regulators. The invention also provides methods of using the Wnt signaling pathway regulators to screen for compds. that modulate Wnt signaling pathway. The methods comprise first screening test compds. for modulators of a Wnt signaling pathway regulator disclosed herein, and then further screening the identified modulating agents for ability to modulate Wnt signaling pathway. The invention further provides methods for modulating Wnt signaling pathway and pharmaceutical compns. for treating diseases and conditions (e.g., tumors) associated with abnormal Wnt signaling activities. The invention is predicated in part on the discoveries by the present inventors of mols. that pos. or neg. regulate Wnt signaling pathway. The present inventors carried out genome-wide siRNA (loss-of-function) and cDNA (gain-of-function) screening for cellular regulators of Wnt signaling pathway. The screening employed a transfection grade T-cell factor reporter (TOPFlash) under control of nuclear  $\beta$ -catenin to reveal the level of Wnt signaling. In order to identify both activators and inhibitors of Wnt signaling pathways, the basal level of Wnt signaling is increased by stimulating with condition medium collected from stably transfected L-wnt3A cells (ATCC). In addition to some known Wnt components (which validate the authenticity of the screens), a number of other genes that activate or inhibit Wnt signaling were identified from the screening. These genes and their encoded polypeptides are termed herein "Wnt signaling pathway regulators". One such regulator, NME2, was chosen for further studies. It was found that regulating NME2 expression level changed migration behavior of cultured cancer cells. Further, it

was also observed that overexpression of NME2 can lead to developmental defect in whole organism.

L8 ANSWER 4 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:1248277 HCAPLUS  
DOCUMENT NUMBER: 146:22551  
TITLE: Random mutagenesis, screening and selection of  
protease variants with altered sensitivity to activity  
modulators  
INVENTOR(S): Koltermann, Andre; Kettling, Ulrich; Haupts, Ulrich;  
Coco, Wayne; Tebbe, Jan; Votsmeier, Christian;  
Scheidig, Andreas  
PATENT ASSIGNEE(S): Direvo Biotech AG, Germany  
SOURCE: Eur. Pat. Appl., 93pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1726643	A1	20061129	EP 2005-104543	20050527
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
US 2006269538	A1	20061130	US 2006-441635	20060526
WO 2006125827	A1	20061130	WO 2006-EP62644	20060526
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: EP 2005-104543 A 20050527  
US 2005-685566P P 20050527  
US 2005-686021P P 20050531

AB The present invention provides a method for the selection of proteases with altered sensitivity to one or more activity-modulating substances. The method combines the provision of a protease library (i.e., phage display library) encoding polynucleotide sequences generated by using PCR mutagenesis, expression of the enzymes, screening of the library in the presence of one or several activity-modulating substances, selection of variants with altered sensitivity to one or several activity-modulating substances and isolation of those polynucleotide sequences that encode for the selected variants. In particular, mutant variants of human trypsin are disclosed.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 2006476747 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16769036  
TITLE: Dipeptide proline diphenyl phosphonates are potent, irreversible inhibitors of seprase (FAPalpha).  
AUTHOR: Gilmore Brendan F; Lynas John F; Scott Christopher J; McGoohan Caroline; Martin Lorraine; Walker Brian  
CORPORATE SOURCE: School of Pharmacy, Queens University Belfast, Medical

SOURCE: Biology Centre, 97 Lisburn Road, Belfast BT9 7BL, UK.  
Biochemical and biophysical research communications, (2006  
Jul 28) Vol. 346, No. 2, pp. 436-46.  
Journal code: 0372516. ISSN: 0006-291X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200608

ENTRY DATE: Entered STN: 12 Aug 2006  
Last Updated on STN: 31 Aug 2006  
Entered Medline: 30 Aug 2006

AB Dipeptidyl peptidase IV (DPP-IV) and seprase belong to a small group of membrane-bound, proline-specific serine proteases, the serine integral membrane proteases (SIMPs). Whilst DPP-IV is the most exhaustively studied peptidase in this class, relatively less is known about the inhibitor/substrate specificity of its close homolog seprase. Additionally, whereas, DPP-IV expression is largely ubiquitous, seprase expression is restricted to tumour and tissue remodelling sites in vivo. Consequently, the highly restricted expression and distribution of seprase potentially make it an excellent therapeutic target for the modulation of neoplastic invasion and metastasis. Against this background, we now wish to report on the design, synthesis, and kinetic testing of a series of dipeptide proline diphenyl phosphonates, against DPP-IV and seprase. The most potent inhibitor of DPP-IV and seprase was found to be Gly-ProP(OPh)<sub>2</sub>, which exhibited overall second-order rate constants of inactivation of  $5.24 \times 10^5 \text{ M}^{-1} \text{ min}^{-1}$  and  $1.06 \times 10^4 \text{ M}^{-1} \text{ min}^{-1}$  against DPP-IV and seprase, respectively. Both proteases displayed differing profiles of susceptibility towards the other members of the series of inhibitors synthesised. In addition, Gly-ProP(OPh)<sub>2</sub> and Tyr-ProP(OPh)<sub>2</sub> were found to exert a considerable, dose-dependent anti-invasive effect on the LOX melanoma cell line, in vitro.

L8 ANSWER 6 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2006215122 EMBASE

TITLE: Expression of the serine protease DESC1  
correlates directly with normal keratinocyte  
differentiation and inversely with head and neck squamous  
cell carcinoma progression.

AUTHOR: Sedghizadeh P.P.; Maliery S.R.; Thompson S.J.; Kresty L.;  
Michael Beck F.; Parkinson E.K.; Biancamano J.; Lang J.C.

CORPORATE SOURCE: P.P. Sedghizadeh, Department of Oral and Maxillofacial  
Surgery, Ohio State University, College of Dentistry, 305  
West 12th Avenue, Columbus, OH 43218-2357, United States.  
sedghizadeh.1@osu.edu

SOURCE: Head and Neck, (2006) Vol. 28, No. 5, pp. 432-440. .  
Refs: 26  
ISSN: 1043-3074 E-ISSN: 1097-0347 CODEN: HEANEE

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 011 Otorhinolaryngology  
016 Cancer

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 25 May 2006  
Last Updated on STN: 25 May 2006

AB Background. As part of ongoing studies aimed at identifying the molecular events involved in head and neck squamous cell carcinoma progression, we recently isolated a novel serine protease, DESC1. This study was conducted to further characterize DESC1. Methods. Specimens of normal, dysplastic, and carcinomatous oropharyngeal mucosa (n = 31) were evaluated for DESC1 immunoreactivity using standard streptavidin-biotin

immunoperoxidase techniques. Between-lesion stain intensity values were analyzed using multiple Wilcoxon tests. DESC1 expression was also evaluated in cultured human keratinocytes after induction of differentiation by calcium challenge, with subsequent real-time reverse transcriptase-polymerase chain reaction quantification. Results. DESC1 immunoreactivity decreased as lesions approached a malignant phenotype. Post hoc testing comparing the different lesion types and DESC1 staining values showed significance between "normal" and "carcinoma" ( $p = .0017$ ) groups. Induction of normal keratinocyte differentiation by calcium challenge was accompanied by an increase in DESC1 expression ( $p = .002$ ). Conclusions. These results suggest downregulation of DESC1 during squamous cell carcinoma progression and upregulation during normal epithelial differentiation. .COPYRG. 2005 Wiley Periodicals, Inc.

L8 ANSWER 7 OF 43 NTIS COPYRIGHT 2007 NTIS on STN  
 ACCESSION NUMBER: 2006(01):00631  
 NTIS ORDER NUMBER: ADA437246/XAB  
 TITLE: Endometase in Androgen-Repressed Human Prostate Cancer. Annual rept. 25 Feb 2004-25 Feb 2005.  
 AUTHOR: Sang, Q. A.  
 CORPORATE SOURCE: Florida State Univ., Tallahassee. (010167000 139850)  
 NUMBER OF REPORT: ADA437246/XAB  
 124p; Mar 2005  
 NUMBER OF CONTRACT: DAMD17-02-1-0238  
 CONTROLLED TERM: Report  
 COUNTRY: United States  
 LANGUAGE: English  
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 NTIS Prices: PC A07/MF A02  
 OTHER SOURCE: GRA&I0601

AB Prostate cancer invasion and metastasis is the leading cause of patient death. We reported the discovery, cloning, and characterization of human matrix metalloproteinase-26 (MMP-26), endometase. We have been testing three specific hypotheses: (1) The expression levels of MMP-26 is correlated with the metastatic potentials and the degrees of malignancy of human prostate cells; (2) MMP-26 has unique structure and enzymatic function; (3) MMP-26 enhances prostate cancer invasion by digesting extracellular matrix proteins and inactivating serine proteinase inhibitors, and specific inhibitors of MMP-26 block prostate cancer invasion. We report that levels of MMP-26 protein in human prostate carcinomas and high-grade prostate intraepithelial neoplasia from multiple patients were significantly higher than those in prostatitis, benign prostate hyperplasia, and normal prostate glandular tissues. Prostate cancer cells transfected with MMP-26 cDNA are more invasive and with an inactive mutant are less invasive than the parental cell lines. MMP-26 promoted prostate cancer invasion via activation of pro-gelatinase B/MMP-9. The endometase active site has an intermediate S1' pocket using synthetic MMP inhibitors. Some new synthetic MMP inhibitors are stable in cell culture media and can block the invasion of prostate cancer cells. Papers published by Sang lab are attached.

L8 ANSWER 8 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
 ACCESSION NUMBER: 2005469618 EMBASE  
 TITLE: Diagnosis of Hymenoptera venom allergy.  
 AUTHOR: Bilo B.M.; Rueff F.; Mosbech H.; Bonifazi F.; Oude-Elberink

J.N.G.; Birnbaum J.; Bucher C.; Forster J.; Hemmer W.;  
 Incorvaia C.; Kontou-Fili K.; Gawlik R.; Muller U.;  
 Fernandez J.; Jarish R.; Jutel M.; Wuthrich B.

CORPORATE SOURCE: B.M. Bilo, Allergy Unit, Department of Internal Medicine,  
 Immunology, Allergy and Respiratory Diseases, University  
 Hospital, Ancona, Italy

SOURCE: Allergy: European Journal of Allergy and Clinical  
 Immunology, (2005) Vol. 60, No. 11, pp. 1339-1349. .  
 Refs: 144  
 ISSN: 0105-4538 CODEN: LLRGDY

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology  
 026 Immunology, Serology and Transplantation  
 036 Health Policy, Economics and Management  
 037 Drug Literature Index  
 052 Toxicology

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 28 Nov 2005  
 Last Updated on STN: 28 Nov 2005

AB The purpose of diagnostic procedure is to classify a sting reaction by  
 history, identify the underlying pathogenetic mechanism, and identify the  
 offending insect. Diagnosis of Hymenoptera venom allergy thus forms the  
 basis for the treatment. In the central and northern Europe vespid  
 (mainly *Vespula* spp.) and honeybee stings are the most prevalent, whereas  
 in the Mediterranean area stings from *Polistes* and *Vespula* are more  
 frequent than honeybee stings; bumblebee stings are rare throughout Europe  
 and more of an occupational hazard. Several major allergens, usually  
 glycoproteins with a molecular weight of 10-50 kDa, have been identified  
 in venoms of bees, vespids, and ants. The sequences and structures of the  
 majority of venom allergens have been determined and several have been  
 expressed in recombinant form. A particular problem in  
 the field of cross-reactivity are specific immunoglobulin E (IgE)  
 antibodies directed against carbohydrate epitopes, which may induce  
 multiple positive test results (skin test, in vitro tests) of still  
 unknown clinical significance. Venom hypersensitivity may be mediated by  
 immunologic mechanisms (IgE-mediated or non-IgE-mediated venom allergy)  
 but also by nonimmunologic mechanisms. Reactions to Hymenoptera stings  
 are classified into normal local reactions, large local reactions,  
 systemic toxic reactions, systemic anaphylactic reactions, and unusual  
 reactions. For most venom-allergic patients an anaphylactic reaction  
 after a sting is very traumatic event, resulting in an altered  
 health-related quality of life. Risk factors influencing the outcome of  
 an anaphylactic reaction include the time interval between stings, the  
 number of stings, the severity of the preceding reaction, age,  
 cardiovascular diseases and drug intake, insect type, elevated serum  
 tryptase, and mastocytosis. Diagnostic tests should be carried out in all  
 patients with a history of a systemic sting reaction to detect  
 sensitization. They are not recommended in subjects with a history of  
 large local reaction or no history of a systemic reaction.  
 Testing comprises skin tests with Hymenoptera venoms and analysis  
 of the serum for Hymenoptera venom-specific IgE. Stepwise skin  
 testing with incremental venom concentrations is recommended. If  
 diagnostic tests are negative they should be repeated several weeks later.  
 Serum tryptase should be analyzed in patients with a history of a severe  
 sting reaction. Copyright .COPYRG. Blackwell Munksgaard 2005.

L8 ANSWER 9 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights  
 reserved on STN

ACCESSION NUMBER: 2005114673 EMBASE

TITLE: Polymorphisms in SPINK5 are not associated with asthma in a  
 Dutch population.

AUTHOR: Jongepier H.; Koppelman G.H.; Nolte I.M.; Bruinenberg M.;

CORPORATE SOURCE: Bleecker E.R.; Meyers D.A.; Te Meerman G.J.; Postma D.S.  
Dr. D.S. Postma, Department of Pulmonology, University  
Hospital Groningen, Hanzeplein 1, 9700 RB Groningen,  
Netherlands. d.s.postma@int.azg.nl

SOURCE: Journal of Allergy and Clinical Immunology, (2005) Vol.  
115, No. 3, pp. 486-492. .  
Refs: 26  
ISSN: 0091-6749 CODEN: JACIBY

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 005 General Pathology and Pathological Anatomy  
013 Dermatology and Venereology  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
022 Human Genetics  
026 Immunology, Serology and Transplantation

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 7 Apr 2005  
Last Updated on STN: 7 Apr 2005

AB Background: Asthma and allergic phenotypes are complex genetic diseases with known linkage to chromosome 5q. This region has many candidate genes, including serine protease inhibitor Kazal type 5 (SPINK5), which has been associated with asthma and atopic dermatitis in family-based studies of children with atopic dermatitis. Objective: We sought to investigate whether single nucleotide polymorphisms in SPINK5 are associated with asthma, atopic phenotypes, and atopic dermatitis. Methods: We investigated whether single nucleotide polymorphisms in SPINK5 (ie, -785 A/G, Asn368Ser, and Lys420Glu) are associated with asthma, atopic phenotypes, and atopic dermatitis in 200 families ascertained by a proband with asthma (nonaffected spouses served as a matched control population) and an independent set of 252 trios with asthma. Results: We found no association with asthma, atopic phenotypes, and atopic dermatitis after correction for multiple testing. Conclusion: The negative results in this study suggest that SPINK5 is not associated with asthma or atopic phenotypes in individuals ascertained by a proband with asthma. This is consistent with the finding that SPINK5 is not expressed in the lung. Because our patients were ascertained for asthma, a role of SPINK5 in atopic dermatitis cannot be excluded. .COPYRG. 2005 American Academy of Allergy, Asthma and Immunology.

L8 ANSWER 10 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2005255849 EMBASE

TITLE: Enzymes as occupational and environmental respiratory sensitisers.

AUTHOR: Baur X.

CORPORATE SOURCE: X. Baur, Ordinariat und Zentralinstitut fur Arbeitsmedizin  
Hamburg, Seewartenstrasse 10, 20459 Hamburg, Germany.  
baur@uke.uni-hamburg.de

SOURCE: International Archives of Occupational and Environmental  
Health, (2005) Vol. 78, No. 4, pp. 279-286. .  
Refs: 41  
ISSN: 0340-0131 CODEN: IAOHDE

COUNTRY: Germany

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis  
017 Public Health, Social Medicine and Epidemiology  
035 Occupational Health and Industrial Medicine  
052 Toxicology

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 30 Jun 2005  
Last Updated on STN: 30 Jun 2005

AB A literature review shows that airborne enzymes occurring in the general

environment and in purified form in industrial production have a high allergenic potential to the airways, causing rhinitis, conjunctivitis and asthma. It can be assumed that this also applies to the increasing number of enzymes manufactured by the cloning of fast-growing genetically engineered microorganisms. Cross-sectional studies demonstrate exposure-response relations for IgE-mediated sensitisation and airway disorders. Atopic individuals are more susceptible to enzyme allergy than non-atopic individuals. Skin prick testing and measurement of specific IgE antibodies have been shown to be useful diagnostic tools. Very high concentrations of proteases may lead to emphysema. There is also evidence for non-allergic airway inflammation by proteases, probably via protease-activated receptor-2 and intracellular Ca(2+) release. It is recommended that all enzymes be classified with the risk phrase R42 (may cause sensitisation by inhalation) and that their inhalative uptake be totally avoided. .COPYRG. Springer-Verlag 2005.

L8 ANSWER 11 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN DUPLICATE 1

ACCESSION NUMBER: 2005578753 EMBASE

TITLE: A novel capture-ELISA for detection of anti-neutrophil cytoplasmic antibodies (ANCA) based on c-myc peptide recognition in carboxy-terminally tagged recombinant neutrophil serine proteases.

AUTHOR: Lee A.S.; Finkielman J.D.; Peikert T.; Hummel A.M.; Viss M.A.; Specks U.

CORPORATE SOURCE: U. Specks, Thoracic Disease Research Unit, Division of Pulmonary and Critical Care Medicine, Mayo Clinic and Foundation, 200 First Street SW, Rochester, MN 55905, United States. specks.ulrich@mayo.edu

SOURCE: Journal of Immunological Methods, (20 Dec 2005) Vol. 307, No. 1-2, pp. 62-72. .

Refs: 30

ISSN: 0022-1759 CODEN: JIMMBG

PUBLISHER IDENT.: S 0022-1759(05)00308-X

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 026 Immunology, Serology and Transplantation  
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 26 Jan 2006  
Last Updated on STN: 26 Jan 2006

AB Testing for antineutrophil cytoplasmic antibodies (ANCA) reacting with proteinase 3 (PR3) is part of the routine diagnostic evaluation of patients with small vessel vasculitis. For PR3-ANCA detection, capture ELISAs are reported to be superior to direct ELISAs. Standard capture ELISAs, in which PR3 is anchored by anti-PR3 monoclonal antibodies (moAB), have two potential disadvantages. First, the capturing moAB may compete for epitopes recognized by some PR3-ANCA, causing occasional false-negative results. Second, the capture of recombinant PR3 mutant molecules becomes unpredictable as modifications of specific conformational epitopes may not only affect the binding of PR3-ANCA, but also the affinity of the capturing anti-PR3 moAB. Here, we describe a new capture ELISA, and its application for PR3-ANCA detection. This new assay is based on the standardized capture of a variety of different carboxy-terminally c-myc tagged recombinant ANCA target antigens using anti-c-myc coated ELISA plates. Antigen used include c-myc tagged human rPR3 variants (mature and pro-form conformations), mouse mature rPR3 and human recombinant neutrophil elastase. This new anti-c-myc-capture ELISA for PR3-ANCA detection has an intra- and inter-assay coefficient of variation of 3.6% to 7.7%, and 15.8% to 18.4%, respectively. The analytical sensitivity and specificity for PR3-ANCA positive serum samples were 93% and 100%, respectively when rPR3 with mature conformation was used as target



antigen, and 83% and 100% when the pro-enzyme conformation was employed. In conclusion, this new anti-c-myc capture ELISA compares favorably to our standard capture ELISA for PR3-ANCA detection, enables the unified capture of different ANCA target antigens through binding to a c-myc tag, and allows capture of rPR3 mutants necessary for PR3-ANCA epitope mapping studies. .COPYRG. 2005 Elsevier B.V. All rights reserved.

L8 ANSWER 12 OF 43 NTIS COPYRIGHT 2007 NTIS on STN  
ACCESSION NUMBER: 2004(24):00479  
NTIS ORDER NUMBER: ADA425166/XAB  
TITLE: Endometase in Androgen-Repressed Human  
Prostate Cancer. Annual rept. 25 Feb 2003-25 Feb 2004.  
Reprint: Endometase in Androgen-Repressed Human  
Prostate Cancer.  
AUTHOR: Sang, Q. A.  
CORPORATE SOURCE: Florida State Univ., Tallahassee. (010167000 139850)  
NUMBER OF REPORT: ADA425166/XAB  
52p; Mar 2004  
NUMBER OF CONTRACT: DAMD17-02-1-0238  
CONTROLLED TERM: Report  
COUNTRY: United States  
LANGUAGE: English  
NOTES: The original document contains color images. All DTIC  
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(703)605-6900; and email at orders@ntis.gov. NTIS is  
located at 5285 Port Royal Road, Springfield, VA,  
22161, USA.  
NTIS Prices: PC A05/MF A01  
OTHER SOURCE: GRA&I0424  
AB The spread of prostate cancer cells to other parts of the body is the  
leading cause of patient death. In 2000, we reported the discovery,  
cloning, and characterization of human matrix  
metalloproteinase-26 (MMP-26), endometase. We have been testing  
three specific hypotheses: (1) The expression levels of MMP-26  
is correlated with the metastatic potentials and the degrees of  
malignancy of human prostate cells; (2) MMP-26 has unique  
structure and enzymatic function; (3) MMP-26 enhances prostate cancer  
invasion by digesting extracellular matrix proteins and inactivating  
serine proteinase inhibitors, and specific inhibitors  
of MMP-26 block prostate cancer invasion. We have showed that the levels  
of MMP- 26 protein in human prostate carcinomas from multiple  
patients were significantly higher than those in prostatitis, benign  
prostate hyperplasia, and normal prostate glandular tissues.  
Human breast carcinoma in situ also expressed high  
levels of MMP-26 protein. Prostate cancer cells transfected with MMP-26  
CDNA are more invasive than the parental cell lines. MMP-26 promoted  
prostate cancer invasion via activation of progelatinase B/MMP-9. The  
endometase active site structure has been revealed to have an  
intermediate S1' pocket using synthetic metalloproteinase inhibitors.  
Endometases may be a novel marker for prostate cancer detection and a  
new target for therapy. Reprints published by Sang lab are attached.

L8 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:1081077 HCAPLUS  
DOCUMENT NUMBER: 142:49182  
TITLE: Gene expression profiling in predicting drug  
sensitivity in patients afflicted with hypertension  
INVENTOR(S): Hakonarson, Hakon  
PATENT ASSIGNEE(S): Decode Genetics Ehf., Iceland  
SOURCE: PCT Int. Appl., 440 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004108960	A2	20041216	WO 2004-IB1947	20040604
WO 2004108960	A3	20050714		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004245762	A1	20041216	AU 2004-245762	20040604
CA 2527323	A1	20041216	CA 2004-2527323	20040604
EP 1633885	A2	20060315	EP 2004-736099	20040604
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
US 2005032096	A1	20050210	US 2004-863906	20040608
PRIORITY APPLN. INFO.:			US 2003-477087P	P 20030609
			WO 2004-IB1947	W 20040604

AB Methods of using gene expression profiling to predict the response of a patient to antihypertensive drugs is described. The methods involve testing the effects of potential drugs on patterns of gene expression in cell or tissue samples from a patient. Comparison of profiles in test and control samples with a reference gene expression profile is used to assess the effectiveness of a treatment. Anal. of the effects of Cozaar, Norvasc, and Ramace on gene expression in peripheral blood monocytes of hypertension patients is reported.

L8 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2005:2003 HCAPLUS  
DOCUMENT NUMBER: 142:88086  
TITLE: Biomarker proteins and expressed genes for prediction of liver toxicity  
INVENTOR(S): Durham, Stephen K.; Dambach, Donna; Hefta, Stanley; Moulin, Frederic; Gao, Ji; Opiteck, Gregory; Storm, Stephen M.; Garulacan, Leah Ann; Lin, Jun-hsiang  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 107 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004265889	A1	20041230	US 2004-873595	20040622
WO 2005001058	A2	20050106	WO 2004-US20031	20040623
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG

EP 1636338 A2 20060322 EP 2004-776923 20040623

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

PRIORITY APPLN. INFO.:

US 2003-480964P P 20030624

US 2003-529806P P 20031216

WO 2004-US20031 W 20040623

AB The present invention relates to biomarker polypeptides, polynucleotides, and antibodies that have utility in predicting in vitro and/or in vivo hepatotoxicity of various drugs, compds., or other therapeutic agents (i.e., test substances). A combination of proteomic and immunol. techniques are employed to identify and verify components of the conditioned culture media from immortalized human hepatocytes overexpressing cytochrome P 450 3A4. Cells were treated with several individual compds., including L-tyrosine PPAR agonists and HIV protease inhibitors and, for each drug class, clin. determined hepatotoxic and non-hepatotoxic compds were compared. Fifteen polypeptides are identified, including human 14-3-3 $\zeta$  and migration inhibitory factor and their mouse and rat homologs, that are reproducibly and significantly increased in the conditioned media from cells treated with each of the toxic compds as compared to media from cells treated with each of the non-toxic compds. Also related are screens, kits, microarrays, and cell culture systems that employ the polypeptides, polynucleotides, and/or antibodies of the invention. The reagents and methods of the invention are useful for predicting hepatotoxic effects resulting from treatment with one or more test substances, and can be utilized before, after, or concurrently with pre-clin., clin., and/or post-clin. testing. In this way, the reagents and methods of the invention can be used to identify test substances or combinations of test substances that cause hepatic injury, including idiosyncratic hepatotoxicity, and thereby prevent medical complications (e.g., liver failure) resulting from such injury.

L8 ANSWER 15 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004132467 EMBASE

TITLE: Association between polymorphisms in serine protease inhibitor, kazal type 5 and asthma phenotypes in a large German population sample.

AUTHOR: Kabisch M.; Carr D.; Weiland S.K.; Von Mutius E.

CORPORATE SOURCE: M. Kabisch, University Children's Hospital, Ludwig Maximilians University Munich, Lindwurmstrasse 4, D-80337 Munchen, Germany. Michael.Kabisch@kk-i.med.uni-muenchen.de

SOURCE: Clinical and Experimental Allergy, (2004) Vol. 34, No. 3, pp. 340-345. .

Refs: 16

ISSN: 0954-7894 CODEN: CLEAEN

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 005 General Pathology and Pathological Anatomy  
007 Pediatrics and Pediatric Surgery  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
022 Human Genetics  
026 Immunology, Serology and Transplantation

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 15 Apr 2004

Last Updated on STN: 15 Apr 2004

AB Background: Atopic diseases are characterized by immunoglobulin E (IgE)-mediated immune responses towards common allergens, many of which

are proteases. Recently it has been suggested that a proteinase inhibitor gene, SPINK5, which is located on chromosome 5q31, may play a role in the pathogenesis of atopic diseases. Objective: We investigated the association between the polymorphism G1258A leading to a putative amino acid change (Glu420Lys) in serine protease inhibitor, kazal type 5 (SPINK5) and phenotypes of atopic diseases in a large general population sample of German children. Methods: Parental questionnaires were used and children underwent skin prick testing, pulmonary function testing and bronchial challenge. Blood was collected for serum IgE measurements and DNA extraction. In total, 1161 children were genotyped for the SPINK5 Glu420Lys polymorphism and association studies were performed. Results: A significant association between SPINK5 420Lys and the development of asthma was observed (OR 1.77; 95%CI: 1.02-3.06, P = 0.041 for 420Lys homocygotes). Atopic carriers of SPINK5 420Lys showed an increased risk for asthma and asthma symptoms (OR 2.06; 95%CI: 1.01-4.20, P = 0.047). When children with a combination of asthma and atopic dermatitis were compared with normal controls, the SPINK5 420Lys genotype was more prevalent in the disease group (OR 4.56; 95%CI: 1.370-15.12, P = 0.007). No association between SPINK5 420Lys genotypes and total serum IgE levels, skin prick test (SPT) reactivity or atopic dermatitis was observed. Conclusion: These results suggest that SPINK5 Glu420Lys polymorphism may be associated with certain asthma phenotypes characterized by the concomitant expression of asthma and atopic dermatitis or SPT reactivity.

L8 ANSWER 16 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004280489 EMBASE

TITLE: The possibilities and pitfalls for anti-complement therapies in inflammatory diseases.

AUTHOR: Mizuno M.; Morgan B.P.

CORPORATE SOURCE: M. Mizuno, Dept. of Medical Biochem./Immunology, Univ. of Wales College of Medicine, Tenovus Building, Heath Park, Cardiff CF14 4XN, United Kingdom. MIZUNOMI@cardiff.ac.uk

SOURCE: Current Drug Targets: Inflammation and Allergy, (2004) Vol. 3, No. 1, pp. 87-96. .  
Refs: 175  
ISSN: 1568-010X CODEN: CDTICU

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 026 Immunology, Serology and Transplantation  
030 Pharmacology  
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 22 Jul 2004  
Last Updated on STN: 22 Jul 2004

AB The complement system is a key component of innate immunity, acting to protect the host from micro-organisms such as bacteria and other "foreign" threats, including tumor cells. However, excessive activation of complement can injure the host and can even be life threatening. These toxic effects are caused primarily by the excessive production of the anaphylatoxins C3a and C5a during complement activation and excessive formation of membrane attack complex on the host cell membrane. Many inflammatory diseases, including rheumatoid arthritis and glomerulonephritis, are thought to involve excessive activation of complement, both for their development and perpetuation. Uncontrolled complement activation is also implicated in post-ischemic inflammation and tissue damage and in sepsis. Therefore, it is important to regulate the complement system to treat disease. There are still no broadly applicable agents for the therapeutic regulation of excessive complement activation. However, there are now some agents in the development that might provide useful anti-complement therapies in the near future. Current strategies include the use of neutralizing antibodies, small synthetic antagonists,

soluble recombinant forms of the natural complement regulators, and gene therapies to control excessive complement activation. Here we describe these new agents, their strengths and weaknesses and progress in testing the agents in relevant animal models. .COPYRGT. 2004 Bentham Science Publishers Ltd.

L8 ANSWER 17 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 2004133897 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 15026000  
TITLE: Recombinant production, purification and biochemical characterization of domain 6 of LEKTI: a temporary Kazal-type-related serine proteinase inhibitor.  
AUTHOR: Kreutzmann Peter; Schulz Axel; Standker Ludger; Forssmann Wolf-Georg; Magert Hans-Jurgen  
CORPORATE SOURCE: IPF PharmaCeuticals GmbH, Feodor-Lynen-Strasse 31, D-30625 Hannover, Germany.  
SOURCE: Journal of chromatography. B, Analytical technologies in the biomedical and life sciences, (2004 Apr 15) Vol. 803, No. 1, pp. 75-81.  
Journal code: 101139554. ISSN: 1570-0232.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200411  
ENTRY DATE: Entered STN: 18 Mar 2004  
Last Updated on STN: 10 Nov 2004  
Entered Medline: 9 Nov 2004  
AB Lympho-epithelial Kazal-type-related inhibitor (LEKTI) is a 15-domain serine proteinase inhibitor which is of pathophysiological relevance for skin diseases and atopy. Domains 2 and 15 of LEKTI contain six cysteine residues and match the Kazal-type inhibitor motif almost exactly. The other 13 domains seem to be Kazal-type derived but lack the cysteines in positions 3 and 6 usually conserved within this family of inhibitors. Here, we report the recombinant production and comprehensive biochemical characterization of the 7.7 kDa LEKTI domain 6 (LD-6). Testing a selected number of different serine proteinases, we show that both native and recombinant LD-6 exhibit a significant but temporary inhibitory activity on trypsin. Furthermore, the relation of LEKTI domain 6 to Kazal-type inhibitors is confirmed by determining its disulfide bond pattern (1-4/2-3) and its P(1) site located after the second Cys residue of LD-6. The established strategy for the recombinant production of LEKTI domain 6 will enable further investigation of its mode of action and its physiological role.

L8 ANSWER 18 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
ACCESSION NUMBER: 2004229627 EMBASE  
TITLE: Functional classes of bronchial mucosa genes that are differentially expressed in asthma.  
AUTHOR: Laprise C.; Sladek R.; Ponton A.; Bernier M.-C.; Hudson T.J.; Laviolette M.  
CORPORATE SOURCE: C. Laprise, Universite du Quebec a Chicoutimi, Department of Fundamental Sciences, Chicoutimi, Que., Canada.  
catherine\_laprise@uqac.ca  
SOURCE: BMC Genomics, (23 Mar 2004) Vol. 5, . . .  
Refs: 37  
ISSN: 1471-2164 CODEN: BGMEET  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis  
022 Human Genetics

## 037 Drug Literature Index

LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 28 Jun 2004  
Last Updated on STN: 28 Jun 2004

AB Background: Asthma pathogenesis and susceptibility involves a complex interplay between genetic and environmental factors. Their interaction modulates the airway inflammation and remodelling processes that are present even in mild asthma and governs the appearance and severity of symptoms of airway hyperresponsiveness. While asthma is felt to develop as the result of interaction among many different genes and signalling pathways, only a few genes have been linked to an increased risk of developing this condition. Results: We report the results of expression microarray studies using tissue obtained from bronchial biopsies of healthy controls and of subjects with allergic asthma, both before and following inhaled corticotherapy. We identified 79 genes that show significant differences in expression (following Bonferroni cutoff using  $p < 6.6 \times 10^{-6}$  to correct for multiple testing) in asthmatics compared to controls at significance levels. These included 21 genes previously implicated in asthma, such as NOS2A and GPX3, as well as new potential candidates, such as ALOX15, CTSC and CX3CR1. The expression levels of one third of these transcripts were partially or completely corrected following inhaled corticosteroid therapy. Conclusion: The study shows that bronchial biopsies obtained from healthy and asthmatic subjects display distinct expression profiles. These differences provide a global view of physiopathologic processes active in the asthmatic lung and may provide invaluable help to clarify the natural history of asthma. .COPYRG. 2004 Laprise et al; licensee BioMed Central Ltd.

L8 ANSWER 19 OF 43 NTIS COPYRIGHT 2007 NTIS on STN  
ACCESSION NUMBER: 2003(23):00468  
NTIS ORDER NUMBER: ADA415315/XAB  
TITLE: Endometase in Androgen-Repressed Human Prostate Cancer. Annual rept. 25 Feb 2002-25 Feb 2003. Sang, Q. A.  
AUTHOR: Florida State Univ., Tallahassee. (010167000 139850)  
CORPORATE SOURCE: ADA415315/XAB  
NUMBER OF REPORT: 58p; Mar 2003  
NUMBER OF CONTRACT: DAMD17-02-1-0238  
CONTROLLED TERM: Report  
COUNTRY: United States  
LANGUAGE: English  
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OTHER SOURCE: NTIS Prices: PC A05/MF A01  
GRA&I0323

AB The spread of prostate cancer cells to other parts of the body is the leading cause of patient death. In 2000, we reported the discovery, cloning, and characterization of human matrix metalloproteinase-26 (MMP-26), endometase. We have been testing three specific hypotheses: (1) The expression levels of MMP-26 is correlated with the metastatic potentials and the degrees of malignancy of human prostate cells; (2) MMP-26 has unique structure and enzymatic function; (3) MMP-26 enhances prostate cancer invasion by digesting extracellular matrix proteins and inactivating serine proteinase inhibitors, and specific inhibitors of MMP-26 block prostate cancer invasion. We have showed that the levels

of MMP- 26 protein in human prostate carcinomas from multiple patients were significantly higher than those in prostatitis, benign prostate hyperplasia, and normal prostate glandular tissues. MMP-26 promoted prostate cancer invasion via activation of pro-gelatinase B/MMP-9. The endometase active site structure and function have been investigated using synthetic metalloproteinase inhibitors. These results suggest that endometases may be a novel marker for prostate cancer diagnosis and prognosis and a new target for prostate cancer therapy. More detailed results and summary are described in attached two J. Biol. Chemical papers published and in press from Dr. Sang's laboratory.

L8 ANSWER 20 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003471862 EMBASE  
TITLE: Recent patents on experimental therapy for hepatitis C virus infection (1999 - 2002).  
AUTHOR: Hoffmann P.; Quasdorff M.; Gonzalez-Carmona M.A.; Caselmann W.H.  
CORPORATE SOURCE: W.H. Caselmann, Bavarian Ministry of Environment, Health and Consumer Protection, Schellingstr. 155, D-80797 Munich, Germany. wolfgang.caselmann@stmgev.bayern.de  
SOURCE: Expert Opinion on Therapeutic Patents, (2003) Vol. 13, No. 11, pp. 1707-1723. .  
Refs: 140  
ISSN: 1354-3776 CODEN: EOTPEG  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 004 Microbiology  
030 Pharmacology  
037 Drug Literature Index  
038 Adverse Reactions Titles  
039 Pharmacy  
048 Gastroenterology  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 4 Dec 2003  
Last Updated on STN: 4 Dec 2003

AB Despite encouraging progress, antiviral treatment is far from achieving eradication of hepatitis C virus (HCV) infection. Therefore, a large body of new patents concerning novel therapeutic concepts and agents is claimed every year. This review comprises information revealed about granted patents on experimental therapy for HCV infection from 1999 to 2002 but does not intend to be comprehensive. A great part of the inventions described represent peptidomimetic inhibitors of NS3/4-protease, but chemicals, nucleoside analogues or oligodeoxynucleotides are also discussed. The efficacy, specificity and toxicity for most of the claimed drugs are tested mainly in vitro and clinical trial data are rare. Most compounds are intended for combination therapy with well-known antivirals. other claimed agents, such as recombinant adenoviruses or fusion proteins, are used to improve drug delivery into the cell. A new developing direction of research is the use of immunotherapeutic approaches for HCV therapy.

L8 ANSWER 21 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003214517 EMBASE  
TITLE: Direct thrombin inhibitors.  
AUTHOR: Kaplan K.L.  
CORPORATE SOURCE: Dr. K.L. Kaplan, Hematology-Oncology Unit, Department of Medicine, Univ. Rochester Sch. of Med./Dent., 601 Elmwood Avenue, Rochester, NY 14642, United States.  
karen\_kaplan@urmc.rochester.edu  
SOURCE: Expert Opinion on Pharmacotherapy, (1 May 2003) Vol. 4, No. 5, pp. 653-666. .

Refs: 124  
ISSN: 1465-6566 CODEN: EOPHF7  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery  
025 Hematology  
030 Pharmacology  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 19 Jun 2003  
Last Updated on STN: 19 Jun 2003

AB This review deals with a newly-developed category of antithrombotic drugs - the direct thrombin inhibitors. These agents interact with thrombin and block its catalytic activity on fibrinogen, platelets and other substrates. Heparin and its derivatives (low molecular weight heparins and the active pentasaccharide) inhibit thrombin and/or other coagulation serine proteases indirectly via antithrombin, and the warfarin-type drugs interfere with the synthesis of the precursors of the coagulation serine proteases. The direct thrombin inhibitors approved for clinical use at present (lepirudin, desirudin, bivalirudin, argatroban) and another in the advanced clinical testing stage (melagatran/ximelagatran), are the subject of this review. The chemical structure; kinetics of thrombin inhibition; pharmacokinetics and clinical use of each of these is discussed.

L8 ANSWER 22 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003335371 EMBASE  
TITLE: Role of the geneticist in testing and counseling for inherited thrombophilia.  
AUTHOR: Reich L.M.; Bower M.; Key N.S.  
CORPORATE SOURCE: Prof. N.S. Key, MMC 480 Mayo Building, 420 Delaware Street, SE, Minneapolis, MN 55455, United States  
SOURCE: Genetics in Medicine, (2003) Vol. 5, No. 3, pp. 133-143. .  
Refs: 73  
ISSN: 1098-3600 CODEN: GEMEF3  
COUNTRY: United States  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 022 Human Genetics  
017 Public Health, Social Medicine and Epidemiology  
025 Hematology  
037 Drug Literature Index  
029 Clinical Biochemistry  
038 Adverse Reactions Titles  
005 General Pathology and Pathological Anatomy  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 4 Sep 2003  
Last Updated on STN: 4 Sep 2003

AB Within the past decade, the identification of two mutations that are relatively prevalent among the white population (the factor V Leiden and prothrombin G20210A gene mutations) has paved the way for a number of large cohort studies that have greatly advanced our understanding of the pathogenesis of venous thromboembolism (VTE). VTE is clearly a multigenic disorder, with well-characterized examples of gene-gene and gene-environment interactions underlying its pathogenesis. Increasing numbers of patients are being referred for testing, and many more diagnoses of inherited thrombophilia are being made. The purpose of this article is to discuss the practical applications of both diagnostic testing and genetic counseling for the major inherited thrombophilias: inherited resistance to activated protein C/factor V Leiden, prothrombin G20210A mutation, protein C deficiency, protein S



deficiency, and antithrombin deficiency. A description of each entity is included along with a discussion of the indications for testing, selection of the most appropriate screening test, and proper interpretation of test results. Informed consent for testing, screening of asymptomatic individuals in special circumstances (such as during pregnancy or before initiation of estrogen therapy), screening of family members, and posttest education are also addressed. This article emphasizes that these polymorphisms should be regarded as risk factors for thrombosis whose clinical expression generally depends on the coexistence of additional thrombophilic mutations or environmental conditions that provoke the development of VTE.

L8 ANSWER 23 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003115575 EMBASE  
TITLE: Motion - Genetic testing is useful in the diagnosis of nonhereditary pancreatic conditions: Arguments for the motion.  
AUTHOR: Whitcomb D.C.  
CORPORATE SOURCE: Dr. D.C. Whitcomb, Div. of Gastroenterol. Hepatol./Nut., UPMC Presbyterian, University of Pittsburgh, 200 Lothrop Street, Pittsburgh, PA 15213, United States. whitcomb@pitt.edu  
SOURCE: Canadian Journal of Gastroenterology, (1 Jan 2003) Vol. 17, No. 1, pp. 47-52. .  
Refs: 54  
ISSN: 0835-7900 CODEN: CJGAEJ  
COUNTRY: Canada  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 022 Human Genetics  
048 Gastroenterology  
LANGUAGE: English  
SUMMARY LANGUAGE: English; French  
ENTRY DATE: Entered STN: 27 Mar 2003  
Last Updated on STN: 27 Mar 2003

AB Mutations of three major genes are associated with an increased risk of acute and chronic pancreatitis: the cationic trypsinogen (PRSS1) gene, the cystic fibrosis transmembrane conductance regulator (CFTR) gene, and the pancreatic secretory trypsin inhibitor (PSTI) or serine protease inhibitor, Kazal type 1 (SPINK1) gene. Some autosomal dominant forms of hereditary pancreatitis are associated with mutations of the PRSS1 gene, which can be readily identified by genetic testing. Mutations of the CFTR gene can lead either to cystic fibrosis or to idiopathic chronic pancreatitis, and to a variety of cystic fibrosis-associated disorders, including congenital bilateral absence of the vas deferens and sinusitis. These mutations, as with those of the SPINK1 (or PSTI) gene, are prevalent in North America; thus, the presence of such a mutation in an asymptomatic person does not confer a high risk of developing pancreatitis. Combinations of mutations of the PRSS1 and SPINK1 genes lead to more severe disease, as indicated by an earlier onset of symptoms, which suggests that SPINK1 is a disease modifier. The major fear expressed by potential candidates for genetic testing is that the results could lead to insurance discrimination. Studies of the positive predictive value of genetic tests are hampered by recruitment bias and lack of knowledge of family history of pancreatitis. Genetic testing is most useful for persons for whom family members have already been found to exhibit a particular pancreatitis-associated mutation. In the future, increased knowledge of the myriad genetic causes of pancreatitis, as well as advances in the diagnosis and treatment of early chronic pancreatitis, should enhance the utility of genetic testing.

L8 ANSWER 24 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003178063 EMBASE  
 TITLE: Chronic pancreatitis and cystic fibrosis.  
 AUTHOR: Witt H.  
 CORPORATE SOURCE: Dr. H. Witt, Kinderklinik, Char.-Campus Virchow-Klinikum,  
 Humboldt-Universitat, Augustenburger Platz 1, D-13353  
 Berlin, Germany. heiko.witt@charite.de  
 SOURCE: Gut, (1 May 2003) Vol. 52, No. SUPPL. 2, pp. ii31-ii41. .  
 Refs: 166  
 ISSN: 0017-5749 CODEN: GUTTAK  
 COUNTRY: United Kingdom  
 DOCUMENT TYPE: Journal; Conference Article  
 FILE SEGMENT: 005 General Pathology and Pathological Anatomy  
 022 Human Genetics  
 048 Gastroenterology  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 19 May 2003  
 Last Updated on STN: 19 May 2003

AB Recent discoveries of trypsinogen and trypsin inhibitor mutations in patients with chronic pancreatitis (CP) support the hypothesis that an inappropriate activation of pancreatic zymogens to active enzymes within the pancreatic parenchyma starts the inflammatory process. Current data suggest that CP may be inherited dominant, recessive, or complex as a result of mutations in the above mentioned or yet unidentified genes. Evaluation of patients with CP should include genetic testing. Cystic fibrosis (CF) is an autosomal recessive inherited disorder caused by mutations in the CF transmembrane conductance regulator (CFTR) gene and is characterised by pancreatic insufficiency and chronic bronchopulmonary infection. The progression and severity of pulmonary disease differs considerably between people with identical CFTR mutations and does not seem to correlate with the type or class of the CFTR mutation. The identification of further disease modifying genetic factors will increase the pathophysiological understanding and may help to identify new therapeutic targets.

L8 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:293830 HCAPLUS  
 DOCUMENT NUMBER: 136:305218  
 TITLE: Novel serine protease genes related to DPPIV and use thereof in screening for inhibitors and therapy  
 INVENTOR(S): Qi, Steve; Akinsanya, Karen O.; Riviere, Pierre J.-M.; Junien, Jean-Louis  
 PATENT ASSIGNEE(S): Ferring BV, Neth.  
 SOURCE: PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031134	A2	20020418	WO 2001-US31874	20011012
WO 2002031134	A3	20030717		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

CA 2425001	A1	20020418	CA 2001-2425001	20011012
AU 200213138	A	20020422	AU 2002-13138	20011012
US 2002115843	A1	20020822	US 2001-976674	20011012
US 6844180	B2	20050118		
EP 1346033	A2	20030924	EP 2001-981501	20011012
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 200301356	A2	20031028	HU 2003-1356	20011012
JP 2004528812	T	20040924	JP 2002-534503	20011012
CN 1636061	A	20050706	CN 2001-817312	20011012
NZ 525443	A	20060428	NZ 2001-525443	20011012
NO 2003001702	A	20030515	NO 2003-1702	20030411
ZA 2003003306	A	20040812	ZA 2003-3306	20030429
IN 2003CN00697	A	20050415	IN 2003-CN697	20030508
US 2005059081	A1	20050317	US 2004-982512	20041105
US 7157241	B2	20070102		
AU 2006228068	A1	20061102	AU 2006-228068	20061013
PRIORITY APPLN. INFO.:				
			US 2000-240117P	P 20001012
			US 2001-976674	A3 20011012
			WO 2001-US31874	W 20011012

AB The invention provides protein and cDNA sequences for three novel human dipeptidyl peptidase IV-related protein-1, 2, & 3 (DPRP-1, DPRP-2, and DPRP-3, alternative splicing variants). Sequence homol. of these proteins to DPPIV are provided as well as their chromosome locations. The mRNA and protein tissue distribution profiles are provided too. The invention also relates to the recombinant expression and purification of these proteins in mammalian or insect cells. Screening methods for the discovery of new therapeutic agents which are inhibitors of the activity of these proteins or of related proteins, and therapeutic agents discovered by such screening methods, as well as new therapeutic treatments, are all provided. The methods are exemplified by testing the effects of various tetrapeptide amide inhibitors on the dipeptidyl peptidase enzyme activity and effects of DPRP inhibitors on the proliferation of human cancer cells.

L8 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:290719 HCAPLUS  
 DOCUMENT NUMBER: 136:305212  
 TITLE: Tissue plasminogen activator-like protease and its therapeutic use  
 INVENTOR(S): Moore, Paul A.; Ruben, Steven M.; Ebner, Reinhard  
 PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA  
 SOURCE: U.S., 119 pp., Cont. of U.S. Ser. No. 84,491.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6372473	B1	20020416	US 1999-411977	19991004
US 2002061576	A1	20020523	US 1998-84491	19980527
CA 2388487	A1	20010412	CA 2000-2388487	20001003
WO 2001025252	A1	20010412	WO 2000-US27239	20001003
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

EP 1224200	A1	20020724	EP 2000-970546	20001003
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003511017	T	20030325	JP 2001-528195	20001003
US 2002177213	A1	20021128	US 2002-57951	20020129
US 6815534	B2	20041109		
US 2002164768	A1	20021107	US 2002-102704	20020322
US 2004265968	A1	20041230	US 2004-894043	20040720
US 7205139	B2	20070417		
US 2005164366	A1	20050728	US 2005-35988	20050118
PRIORITY APPLN. INFO.:			US 1997-48000P	P 19970528
			US 1998-84491	A2 19980527
			US 1999-411977	A 19991004
			WO 2000-US27239	W 20001003
			US 2002-57951	A3 20020129
			US 2002-102704	A1 20020322

AB The present invention relates to a novel t-PALP protein which is a member of the serine protease family. In particular, isolated nucleic acid mols. are provided encoding the human t-PALP protein. t-PALP polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of t-PALP activity. Also provided are diagnostic methods for detecting circulatory system-related disorders and therapeutic methods for treating circulatory system-related disorders.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 43 MEDLINE on STN  
 ACCESSION NUMBER: 2002218835 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 11952552  
 TITLE: Genetic analysis of a severe case of Netherton syndrome and application for prenatal testing.  
 AUTHOR: Muller F B; Hausser I; Berg D; Casper C; Maiwald R; Jung A; Jung H; Korge B P  
 CORPORATE SOURCE: Department of Dermatology, University of Cologne, Germany.  
 SOURCE: The British journal of dermatology, (2002 Mar) Vol. 146, No. 3, pp. 495-9. Ref: 15  
 Journal code: 0004041. ISSN: 0007-0963.  
 PUB. COUNTRY: England: United Kingdom  
 DOCUMENT TYPE: (CASE REPORTS)  
 Journal; Article; (JOURNAL ARTICLE)  
 (RESEARCH SUPPORT, NON-U.S. GOV'T)  
 General Review; (REVIEW)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200205  
 ENTRY DATE: Entered STN: 17 Apr 2002  
 Last Updated on STN: 2 Jan 2003  
 Entered Medline: 7 May 2002

AB Netherton syndrome (NS) is a rare autosomal recessive disease with variable expression. It is defined by a triad of symptoms: congenital ichthyosiform erythroderma, trichorrhexis invaginata and atopy. Recently, genetic linkage has been established to the SPINK5 gene locus on chromosome 5q32 encoding the serine protease inhibitor LEKTI. In this study, we present a recurrent homozygous mononucleotide deletion (153delT) resulting in a severe case of NS exhibiting exfoliative erythroderma with lethal outcome at the age of 4 months and its application in prenatal testing in a subsequent pregnancy of the mother.

L8 ANSWER 28 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
 ACCESSION NUMBER: 2002334200 EMBASE  
 TITLE: The central role of thromboxane and platelet activating

factor receptors in ex vivo regulation of endotoxin-induced monocyte tissue factor activity in human whole blood.

AUTHOR: Eilertsen K.-E.; Oterud B.  
CORPORATE SOURCE: K.-E. Eilertsen, Department of Biochemistry, Institute of Medical Biology, University of Tromso, N-9037 Tromso, Norway. Erik.Eilertsen@fagmed.uit.no  
SOURCE: Journal of Endotoxin Research, (2002) Vol. 8, No. 4, pp. 285-293. .  
Refs: 51  
ISSN: 0968-0519 CODEN: JENREB  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
025 Hematology  
026 Immunology, Serology and Transplantation  
030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 3 Oct 2002  
Last Updated on STN: 3 Oct 2002

AB Expression of tissue factor (TF) by activated monocytes may initiate thrombotic episodes associated with diseases, such as thrombosis and atherosclerosis. In this study, steps in the regulatory pathways of lipopolysaccharide (LPS)-induced monocyte TF activity and released TNF- $\alpha$  in human whole blood were probed for using an array of inhibitors, comprising specific inhibitors of cytosolic phospholipase A(2) (PLA(2)) (AACOCF(3)), secretory PLA(2) (SB-203347), protein kinase (PK) (staurosporine), PKC (GF-109203; BIM), and serine protease (Pefabloc SC), antagonists of thromboxane prostanoid (TP) receptor (R) (SQ-29548), platelet activating factor (PAF) R (BN-52021), leukotriene B(4) R (SC-41930), serotonin R (cyproheptadine), fibronectin/fibrinogen R (RGDS), and finally, creatine phosphate/creatine phosphokinase (CP/CPK) which removes ADP. Whereas when added alone neither of these agents significantly inhibited LPS-induced TF or TNF- $\alpha$ , when presented as a reference cocktail comprising all the agents, TF activity and TNF- $\alpha$  were reduced by 77% and 49%, respectively. By subsequently testing a series of incomplete inhibitory cocktails equal to the reference except for deleted single agents or combinations of two or three active agents, the inhibitory effect of the reference cocktail could be shown to depend on the presence of the protease inhibitor and the thromboxane A(2) and PAF antagonists.

L8 ANSWER 29 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2001246852 EMBASE  
TITLE: A new era in pyrogen testing.  
AUTHOR: Ding J.L.; Ho B.  
CORPORATE SOURCE: J.L. Ding, Dept. of Biological Sciences, National University of Singapore, Science Drive 4, 10 Kent Ridge Crescent 117543, Singapore. dbstdjl@nus.edu.sg  
SOURCE: Trends in Biotechnology, (1 Aug 2001) Vol. 19, No. 8, pp. 277-281. .  
Refs: 61  
ISSN: 0167-7799 CODEN: TRBIDM  
PUBLISHER IDENT.: S 0167-7799(01)01697-8  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 004 Microbiology  
005 General Pathology and Pathological Anatomy  
006 Internal Medicine  
037 Drug Literature Index  
LANGUAGE: English

SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 2 Aug 2001  
Last Updated on STN: 2 Aug 2001

AB Pyrogens are substances (usually of biological origin) that cause fever after injection. The best-studied pyrogen is lipopolysaccharide (LPS, also known as endotoxin), found in the membrane of Gram-negative bacteria. During Gram-negative sepsis, endotoxin stimulates host macrophages to release inflammatory cytokines and excessive inflammation causes multiple organ failure and death. Endotoxins are thus ubiquitous pathogenic molecules that are a bane to the pharmaceutical industry and medical community. Limulus amoebocyte lysate (LAL) has been widely used for approx. 25 years for the detection of endotoxin in quality control of injectable drugs and medical devices. However, variations in sensitivity and specificity of LAL to endotoxin, and the limited supply of limulus (horseshoe crabs) has called for an alternative pyrogen test. Recombinant Factor C (rFC), the endotoxin-inducible coagulation enzyme in LAL, forms the basis of a novel micro-enzymatic assay for high-throughput screens of endotoxin and opens a new era in endotoxin testing. Endotoxin activates the rFC zymogen, which catalytically hydrolyses synthetic substrates to form measurable products, thus quantifying the endotoxin.

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ACCESSION NUMBER: 2001044197 EMBASE  
TITLE: Cancer risk related to mammary gland structure and development.  
AUTHOR: Russo J.; Yun Fu Hu; Silva I.D.C.G.; Russo I.H.  
CORPORATE SOURCE: Dr. J. Russo, Breast Cancer Research Laboratory, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111, United States. J\_Russo@fccc.edu  
SOURCE: Microscopy Research and Technique, (15 Jan 2001) Vol. 52, No. 2, pp. 204-223. .  
Refs: 140  
ISSN: 1059-910X CODEN: MRTEEO  
COUNTRY: United States  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 016 Cancer  
021 Developmental Biology and Teratology  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 15 Feb 2001  
Last Updated on STN: 15 Feb 2001

AB The breast undergoes dramatic changes in size, shape, and function in association with growth, reproduction, and post-menopausal regression. Those changes impact women's lifetime breast cancer risk. An early first full-term pregnancy exerts a protective effect, emphasizing the need for understanding the role of reproductive influences on breast development and on cancer initiation and progression, and providing a paradigm for developing preventive strategies based on physiological principles. Even though the cause of breast cancer and the ultimate mechanisms through which an early pregnancy protects from cancer development remain largely unknown, a likely explanation for this protection has been provided by experimental in vivo and in vitro models. These studies have led to the conclusions that cancer initiation requires the interaction of a carcinogen with an undifferentiated and highly proliferating mammary epithelium, whereas differentiation of the mammary gland inhibits carcinogenic initiation. The process of mammary gland differentiation is the result of complex interactions of ovarian, pituitary, and placental hormones, which in turn induce inhibition of cell proliferation, downregulation of estrogen and progesterone receptors, activation of specific genes, such as inhibin, mammary derived growth factor inhibitor and a serpin-like gene, and expression of extracellular matrix proteins in the normal breast. Cell immortalization and transformation

are associated with the expression of ferritin H and S100P protein, which serve as markers of cancer initiation. Comparative studies of normal and neoplastic breast development have unraveled similarities with experimental models that validate the extrapolation of findings for testing hypotheses on the initiation and progression of breast cancer. .COPYRGHT. 2001 Wiley-Liss, Inc.

L8 ANSWER 31 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 2001491631 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11511292  
TITLE: The spectrum of pathogenic mutations in SPINK5 in 19 families with Netherton syndrome: implications for mutation detection and first case of prenatal diagnosis.  
AUTHOR: Sprecher E; Chavanas S; DiGiovanna J J; Amin S; Nielsen K; Prendiville J S; Silverman R; Esterly N B; Spraker M K; Guelig E; de Luna M L; Williams M L; Buehler B; Siegfried E C; Van Maldergem L; Pfendner E; Bale S J; Uitto J; Hovnanian A; Richard G  
CORPORATE SOURCE: Department of Dermatology and Cutaneous Biology and Jefferson Institute of Molecular Medicine, Jefferson Medical College, Philadelphia, Pennsylvania 19107, USA.  
CONTRACT NUMBER: AR02141 (NIAMS)  
AR47157 (NIAMS)  
SOURCE: The Journal of investigative dermatology, (2001 Aug) Vol. 117, No. 2, pp. 179-87.  
Journal code: 0426720. ISSN: 0022-202X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: OMIM-242100; OMIM-270300  
ENTRY MONTH: 200109  
ENTRY DATE: Entered STN: 6 Sep 2001  
Last Updated on STN: 2 Jan 2003  
Entered Medline: 20 Sep 2001

AB The Comel-Netherton syndrome is an autosomal recessive multisystemic disorder characterized by localized or generalized congenital ichthyosis, hair shaft abnormalities, immune deficiency, and markedly elevated IgE levels. Life-threatening complications during infancy include temperature and electrolyte imbalance, recurrent infections, and failure to thrive. To study the clinical presentations of the Comel-Netherton syndrome and its molecular cause, we ascertained 19 unrelated families of various ethnic backgrounds. Results of initial linkage studies mapped the Comel-Netherton syndrome in 12 multiplex families to a 12 cM interval on 5q32, thus confirming genetic homogeneity of Comel-Netherton syndrome across families of different origins. The Comel-Netherton syndrome region harbors the SPINK5 gene, which encodes a multidomain serine protease inhibitor (LEKTI) predominantly expressed in epithelial and lymphoid tissues. Recently, recessive mutations in SPINK5 were identified in several Comel-Netherton syndrome patients from consanguineous families. We used heteroduplex analysis followed by direct DNA sequencing to screen all 33 exons and flanking intronic sequences of SPINK5 in the affected individuals of our cohort. Mutation analysis revealed 17 distinct mutations, 15 of which were novel, segregating in 14 Comel-Netherton syndrome families. The nucleotide changes included four non-sense mutations, eight small deletions or insertions leading to frameshift, and five splice site defects, all of which are expected to result in premature terminated or altered translation of SPINK5. Almost half of the mutations clustered between exons 2 and 8, including two recurrent mutations. Genotype-phenotype correlations suggested that homozygous nucleotide changes resulting in early truncation of LEKTI are associated with a severe phenotype. For the first time, we used molecular data to perform

prenatal testing, thus demonstrating the feasibility of molecular diagnosis in the Comel-Netherton syndrome.

L8 ANSWER 32 OF 43 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 2000459318 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10966811  
TITLE: High-density mutagenesis by combined DNA shuffling and phage display to assign essential amino acid residues in protein-protein interactions: application to study structure-function of plasminogen activation inhibitor 1 (PAI-I).  
AUTHOR: Stoop A A; Jespers L; Lasters I; Eldering E; Pannekoek H  
CORPORATE SOURCE: Department of Biochemistry, Academic Medical Center, Amsterdam, The Netherlands.  
SOURCE: Journal of molecular biology, (2000 Sep 1) Vol. 301, No. 5, pp. 1135-47.  
Journal code: 2985088R. ISSN: 0022-2836.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200009  
ENTRY DATE: Entered STN: 5 Oct 2000  
Last Updated on STN: 5 Oct 2000  
Entered Medline: 22 Sep 2000

AB The identification of specific amino acid residues involved in protein-protein interaction is fundamental to understanding structure-function relationships. Supported by mathematical calculations, we designed a high-density mutagenesis procedure for the generation of a mutant library of which a limited number of random clones would suffice to exactly localize amino acid residues essential for a particular protein-protein interaction. This goal was achieved experimentally by consecutive cycles of DNA shuffling, under error prone conditions, each followed by exposure of the target protein on the surface of phages to screen and select for correctly folded, functional mutants. To validate the procedure, human plasminogen activator inhibitor 1 (PAI-1) was chosen, because its 3D structure is known, many experimental tools are available and it may serve as a model protein for structure-function studies of serine proteinases and their inhibitors (serpins). After five cycles of DNA shuffling and selection for t-PA binding, analysis of 27 randomly picked clones revealed that PAI-1 mutants contained an average of 9.1 amino acid substitutions distributed over 114 different positions, which were preferentially located at the surface of the protein. This limited collection of mutant PAI-1 preparations contained multiple mutants defective in binding to three out of four tested anti-PAI-1 monoclonal antibodies. Alignment of the nucleotide sequence of defective clones permitted assignment of single dominant amino acid residues for binding to each monoclonal antibody. The importance of these residues was confirmed by testing the properties of single point mutants. From the position of these amino acid residues in the 3D structure of PAI-1 and the effects of the corresponding monoclonal antibodies on t-PA-PAI-1 interaction, conclusions can be drawn with respect to this serpin-serine proteinase interaction.  
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L8 ANSWER 33 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
ACCESSION NUMBER: 2000156024 EMBASE  
TITLE: Antineutrophil cytoplasmic antibodies (ANCA) and systemic vasculitis: Update of assays, immunopathogenesis, controversies, and report of a novel de novo ANCA-associated vasculitis after kidney transplantation.



AUTHOR: Schultz D.R.; Diego J.M.  
 CORPORATE SOURCE: Dr. D.R. Schultz, Department of Medicine, Division of Immunology (R-102), Univ. of Miami School of Medicine, PO Box 016960, Miami, FL 33101, United States  
 SOURCE: Seminars in Arthritis and Rheumatism, (2000) Vol. 29, No. 5, pp. 267-285. .  
 Refs: 143  
 ISSN: 0049-0172 CODEN: SAHRBF  
 COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 009 Surgery  
 026 Immunology, Serology and Transplantation  
 031 Arthritis and Rheumatism  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 18 May 2000  
 Last Updated on STN: 18 May 2000

AB Objectives: To characterize antineutrophil cytoplasmic antibodies (ANCA), their major autoantigens, disease associations, and pathophysiology in systemic vasculitides. To describe a patient with a novel de novo ANCA-associated vasculitis after kidney transplantation. Methods: We reviewed and compiled the literature on ANCA-related topics and systemic vasculitis. Laboratory and clinical data from a cadaveric kidney transplant patient who developed necrotizing vasculitis involving glomerular capillaries, with crescent formation associated with P-ANCA and myeloperoxidase, were analyzed. Results: Large-scale multi-center testing of patient and normal sera by the European ANCA Assay Standardization Project using immunofluorescence assays and enzyme immunoassays indicate the assays have good sensitivity and specificity, and diagnostic utility for ANCA-associated vasculitis. A few investigations coveting basic and clinical research with ANCA remain controversial: whether endothelial cells do or do not express a 29-kd neutral serine protease termed proteinase-3 (PR-3), the target of ANCA in most individuals with Wegener's granulomatosis, and whether anti-myeloperoxidase (MPO) ANCAs recognize s restricted number of epitopes on MPO. This issue has relevance for using monoclonal antibodies to treat patients with vasculitis who have adverse effects from immunosuppressive drugs. The two allelic forms of FcγRIIa (H131/R131) and the two of FcγRIIIb (NA1/NA2) are discussed as possible inheritable genetic elements for vasculitic disorders and for signaling responses. Stimulatory and costimulatory molecules, and cytokine profiles of T lymphocytes are characterized to show that these cells are actively involved in the ANCA-associated vasculitides. The patient described had a de novo ANCA associated small vessel vasculitis which developed after renal transplantation. Conclusions: There have been significant advances in the development of sensitive and specific ANCA assays. The immunopathogenetic mechanism of ANCA involves the constitutive FcγRs, ligands, and signaling responses to activate cytokine-primed neutrophils. This may lead to the generation of reactive oxygen intermediates, degranulation and secretion of intracellular granule contents, and ultimately inflammation and vasculitis. Copyright (C) 2000 W.B. Saunders Company.

L8 ANSWER 34 OF 43 MEDLINE on STN DUPLICATE 3  
 ACCESSION NUMBER: 2000237446 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 10772776  
 TITLE: Effect of the serine protease inhibitor  
 N-tosyl-l-phenylalanine-chloromethyl ketone (TPCK) on MCF-7  
 mammary tumour cells growth and differentiation.  
 AUTHOR: Horman S; Del Bino G; Fokan D; Mosselmans R; Galand P  
 CORPORATE SOURCE: Laboratory of Cytology and Experimental Cancerology, Free  
 University of Brussels (ULB), Faculty of Medicine, 808  
 route de Lennik, Brussels, B-1070, Belgium..  
 pgaland@med.ulb.ac.be

SOURCE: Cell biology international, (2000) Vol. 24, No. 3, pp. 153-61.  
Journal code: 9307129. ISSN: 1065-6995.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200006  
ENTRY DATE: Entered STN: 6 Jul 2000  
Last Updated on STN: 6 Jul 2000  
Entered Medline: 26 Jun 2000

AB Previous studies from this and other laboratories indicated that the oestrogen-regulated heat shock protein HSP27 is involved in the control of MCF-7 cells growth and differentiation, as it also appears to be in other cell types, including osteoblasts and HL-60 cells. In the latter instance, induction of differentiation is associated with the downregulation of myeloblastin, a serine protease now identified as proteinase 3 (hence its designation as PR3/Mbn), mirrored by an increase in the cellular content of the small heat shock protein HSP27, a substrate to this enzyme. Besides, antisense inhibition of PR3/Mbn production sufficed for inducing HL-60 cells monocytic differentiation. This prompted us to examine the hypothesis that a post-translational control on HSP27 levels (and by this on differentiation) by a serine protease might also be operating in human mammary tumour cells. As part of our attempt to evaluate this hypothesis, the present work consisted of testing the effects of a treatment of MCF-7 cells with the serine protease inhibitor N-tosyl-L-phenylalanine-chloromethyl ketone (TPCK). Our data show that this resulted in a four-fold increase in HSP27 content, associated with a 2.5-fold decrease in growth rate, the formation of cytoplasmic vesicles and increased secretion of 52 kDa peptides, identified by Western immunoblot as the isoforms of the oestrogen-regulated protein, cathepsin D. TPCK only affected growth in MDAMB-231 cells (in which HSP27 levels are very low and remained below MCF-7 cells basal levels after treatment) and failed to affect L929 cells, in which the hsp27 gene is silent. This provides circumstantial support for the assumption that effects of TPCK on the MCF-7 cells phenotype are linked to the associated increase in HSP27 content. Our recent demonstration that MCF-7 cells do in fact express PR3/Mbn fits with our concept and opens the way to test it directly, using antisense strategy.  
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L8 ANSWER 35 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
ACCESSION NUMBER: 1999219561 EMBASE  
TITLE: Enzymatic action of human glandular kallikrein 2 (hK2) substrate specificity and regulation by Zn2+ and extracellular protease inhibitors.  
AUTHOR: Lovgren J.; Airas K.; Lilja H.  
CORPORATE SOURCE: J. Lovgren, Department of Biotechnology, University of Turku, Tykistokatu 6, 20520 Turku, Finland.  
janita.lovgren@utu.fi  
SOURCE: European Journal of Biochemistry, (15 Jun 1999) Vol. 262, No. 3, pp. 781-789. .  
Refs: 58  
ISSN: 0014-2956 CODEN: EJBCAI  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 016 Cancer  
029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 8 Jul 1999

Last Updated on STN: 8 Jul 1999

AB Human glandular kallikrein 2 (hK2) is a serine protease expressed by the prostate gland with 80% identity in primary structure to prostate-specific antigen (PSA). Recently, hK2 was shown to activate the zymogen form of PSA (proPSA) in vitro and is likely to be the physiological activator of PSA in the prostate, hK2 is also able to activate urokinase and effectively cleave fibronectin. We studied the substrate specificity of hK2 and regulation of its activity by zinc and extracellular protease inhibitors present in the prostate and seminal plasma. The enzymatic activity and substrate specificity was studied by determining hK2 cleavage sites in the major gel proteins in semen, semenogelin I and II, and by measuring hydrolysis of various tripeptide aminomethylcoumarin substrates. HK2 cleaves substrates C-terminal of single or double arginines. Basic amino acids were also occasionally found at several other positions N-terminal of the cleavage site. Therefore, the substrate specificity of hK2 fits in well with that of a processor of protein precursors. Possible regulation mechanisms were studied by testing the ability of Zn<sup>2+</sup> and different protease inhibitors to inhibit hK2 by kinetic measurements. Inhibitory constants were determined for the most effective inhibitors PCI and Zn<sup>2+</sup>. The high affinity of PCI for hK2 ( $k_{\text{ass}} = 2.0 \times 10^5 \text{ M}^{-1}\text{s}^{-1}$ ) and the high concentrations of PCI (4  $\mu\text{M}$ ) and hK2 (0.2  $\mu\text{M}$ ) in seminal plasma make hK2 a very likely physiological target protease for PCI. hK2 is inhibited by Zn<sup>2+</sup> at micromolar concentrations well below the 9 mM zinc concentration found in the prostate. The enzymatic activity of hK2 is likely to be reversibly regulated by Zn<sup>2+</sup> in prostatic fluid. This regulation may be impaired in CAP and advanced metastatic cancer resulting in lack of control of the hK2 activity and a need for other means of control.

L8 ANSWER 36 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 1999324238 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10394145  
TITLE: Treatment of post-transfusion graft-versus-host disease with nafmostat mesilate, a serine protease inhibitor.  
AUTHOR: Ryo R; Saigo K; Hashimoto M; Kohsaki M; Yasufuku M; Watanabe N; Okada M; Tadokoro K; Juji T  
CORPORATE SOURCE: Division of Blood Transfusion, Kobe University Hospital, Japan.. tyo@med.kobe-u.ac.jp  
SOURCE: Vox sanguinis, (1999) Vol. 76, No. 4, pp. 241-6.  
Journal code: 0413606. ISSN: 0042-9007.  
PUB. COUNTRY: Switzerland  
DOCUMENT TYPE: (CASE REPORTS)  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals; AIDS  
ENTRY MONTH: 199908  
ENTRY DATE: Entered STN: 27 Aug 1999  
Last Updated on STN: 27 Aug 1999  
Entered Medline: 17 Aug 1999

AB BACKGROUND: Cytotoxic T lymphocytes from donors are thought to injure the target organs in post-transfusion graft-versus-host disease (PT-GVHD) through perforin-granzyme- and Fas-dependent cell killings. The protease involved is a serine protease, and nafmostat mesilate (NM), a serine protease inhibitor, has been found to inhibit the in vitro allocytotoxicity of the T cell clone established from a patient with PT-GVHD, thus suggesting the usefulness of NM for treatment of PT-GVHD. CASE REPORT: A 47-year-old male with esophageal cancer, who received 3 units of packed red cells and 20 units of platelet concentrates from 5 unrelated donors, was diagnosed as having PT-GVHD on the basis of typical clinical features, HLA typing of the patient and the responsible donor, and a mixed chimera of CD8+ lymphocytes on microsatellite DNA polymorphism analysis. NM was administered to inhibit the activity of the serine proteases, thought to be granzymes; a liver dysfunction and

thrombocytopenia with leukocytopenia simultaneously improved. Subsequently, a high-dose methylprednisolone pulse therapy and monoclonal anti-CD3 were administered to reduce the donor's proliferating lymphocytes, which resulted in lymphopenia accompanied by elimination of the donor's lymphocytes and normalization of the CD4/CD8 ratio. However, recurrence of the proliferation of the responsible donor's lymphocytes developed after cessation of NM administration, probably because of excessive immunosuppression caused by steroids and the monoclonal anti-CD3. CONCLUSION: This case indicates that administration of a serine protease inhibitor may improve PT-GVHD symptoms by inhibiting cytotoxic T-cell-mediated killing of target cells in fatal PT-GVHD. Steroids and monoclonal anti-CD3 were probably responsible for the transient clinical improvements. More studies are required, however, on mechanisms to eliminate the donor's lymphocytes.

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ACCESSION NUMBER: 97219931 EMBASE  
DOCUMENT NUMBER: 1997219931  
TITLE: Human mast cells expressing recombinant proteinase 3 (PR3) as substrate for clinical testing for anti-neutrophil cytoplasmic antibodies (ANCA).  
AUTHOR: Specks U.; Wiegert E.M.; Hombrger H.A.  
CORPORATE SOURCE: U. Specks, Thoracic diseases Research Unit, Guggenheim Building 642 A, Mayo Clinic and Foundation, 200 First Street SW, Rochester, MN 55905, United States  
SOURCE: Clinical and Experimental Immunology, (1997) Vol. 109, No. 2, pp. 286-295. .  
Refs: 40  
ISSN: 0009-9104 CODEN: CEXIAL  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 025 Hematology  
026 Immunology, Serology and Transplantation  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 22 Aug 1997  
Last Updated on STN: 22 Aug 1997

AB We have expressed conformationally intact, enzymatically active recombinant PR3 in HMC-1 cells (HMC-1/PR3 cells) that is recognized by C-ANCA. Here we directly compared the clinical utility of C-ANCA testing by indirect immunofluorescence (IIF) using HMC-1/PR3 cell cytospin versus polymorphonuclear neutrophil (PMN) cytospin preparations and commercially available anti-PR3 ELISA kits. Two hundred sera were tested independently by three investigators: 101 previously determined to be C-ANCA-positive by routine clinical laboratory testing using standard IIF on PMN cytospins, and 99 control samples chosen primarily because they contained antibodies against other cytoplasmic target antigens. Discrepant test results between the two cellular substrates were found in seven samples: 2/7 were PMN-positive and HMC-1/PR3 cell-negative (one Sjogren's syndrome, one hand injury); 5/7 were PMN-negative and HMC-1/PR3-positive (all Wegener's granulomatosis (WG)). All C-ANCA-positive WG patients were also positive on HMC-1/PR3 cells. IIF using HMC-1/PR3 cells was as sensitive as the most sensitive anti-PR3 ELISA (79.8% versus 80.7%,  $P = 0.739$ ), and more sensitive than standard IIF C-ANCA testing using PMN cytospins (79.8% versus 75.2%,  $P = 0.025$ ) or the anti-PR3 ELISA with the least false-positive test results (79.8% versus 63%,  $P < 0.01$ ). These findings indicate that HMC-1/PR3 cells are a very sensitive antigen-specific substrate for clinical anti-PR3 ANCA testing which appears superior to standard C-ANCA testing using PMN cytospin substrates and anti-PR3 ELISA. Our results also suggest that in WG the C-ANCA fluorescence pattern is not caused by antibodies against target antigens

other than PR3.

L8 ANSWER 38 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 96202507 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8634431  
TITLE: Physiological concentrations of tissue factor pathway inhibitor do not inhibit prothrombinase.  
AUTHOR: Mast A E; Broze G J Jr  
CORPORATE SOURCE: Division of Laboratory Medicine, Washington University School of Medicine, St Louis, MO, USA.  
CONTRACT NUMBER: HL34462 (NHLBI)  
SOURCE: Blood, (1996 Mar 1) Vol. 87, No. 5, pp. 1845-50.  
Journal code: 7603509. ISSN: 0006-4971.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: (COMPARATIVE STUDY)  
Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)  
LANGUAGE: English  
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals  
ENTRY MONTH: 199607  
ENTRY DATE: Entered STN: 19 Jul 1996  
Last Updated on STN: 19 Jul 1996  
Entered Medline: 10 Jul 1996

AB Tissue factor pathway inhibitor (TFPI) is a Kunitz-type serine proteinase inhibitor that directly inhibits factor Xa and, in a factor Xa dependent manner, inhibits the factor VIIa/tissue factor catalytic complex. The inhibitory effect of TFPI in prothrombin activation assays using purified components of the prothrombinase complex was examined. When factor Xa is added to mixtures containing TFPI, prothrombin, calcium ions, and nonactivated platelets or factor V and phospholipids, TFPI significantly reduces subsequent thrombin generation, and the inhibitory effect is enhanced by heparin. If factor Xa is preincubated with calcium ions and thrombin-activated platelets or factor Va and phospholipids to permit formation of prothrombinase before the addition of prothrombin and physiologic concentrations of TFPI (< 8 nmol/L), minimal inhibition of thrombin generation occurs, even in the presence of heparin. Thus, contrary to results in amidolytic assays with chromogenic substrates, prothrombinase is resistant to inhibition by TFPI in the presence of its physiological substrate, prothrombin. Higher concentrations of TFPI (approximately 100 nmol/L), similar to those used in animal studies testing for therapeutic actions of TFPI, do effectively block prothrombinase activity.

L8 ANSWER 39 OF 43 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
ACCESSION NUMBER: 95158364 EMBASE  
DOCUMENT NUMBER: 1995158364  
TITLE: Catalytic role of a surface loop of the complement serine protease factor D.  
AUTHOR: Kim S.; Narayana S.V.L.; Volanakis J.E.  
CORPORATE SOURCE: Clinical Immunol./Rheumatology Div., THT 437, UAB Station, Birmingham, AL 35294, United States  
SOURCE: Journal of Immunology, (1995) Vol. 154, No. 11, pp. 6073-6079.  
ISSN: 0022-1767 CODEN: JOIMA3  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 026 Immunology, Serology and Transplantation  
029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 12 Jun 1995  
Last Updated on STN: 12 Jun 1995

AB We have investigated the structural determinants of the unique functional

properties of complement factor D by constructing and testing a series of trypsin-like mutants of the enzyme. Mutational replacement of the primary substrate-binding pocket of factor D with that of trypsin resulted in a mutant (M1) with greatly reduced proteolytic activity and slightly reduced reactivity toward small thioester substrates. Combining the M1 mutations with substitution of Tyr for Ser94, previously shown to enhance substantially both the proteolytic and esterolytic activities of factor D, produced a mutant (M2) with reactivities similar to M1. Replacement of the surface loop formed by residues 184-188 of M1 and M2 with the corresponding loop of trypsin produced mutants exhibiting one and two orders of magnitude higher esterolytic activity, respectively, than native factor D. However, the proteolytic activity of both mutants was similar to that of M1 and M2. We conclude that loop184-188 is an important determinant of the geometry of the primary specificity pocket of factor D. The low proteolytic activity of these mutants supports the proposal that the proteolytically active conformation of factor D is induced by its natural substrate, C3bB.

L8 ANSWER 40 OF 43 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on  
STN DUPLICATE 5

ACCESSION NUMBER: 1996:36958 BIOSIS  
DOCUMENT NUMBER: PREV199698609093  
TITLE: Proteolytic activity of NS3 serine  
proteinase of hepatitis C virus efficiently  
expressed in Escherichia coli.  
AUTHOR(S): Shoji, Ikuo; Suzuki, Tetsuro; Chieda, Shinya; Sato,  
Mitsuru; Harada, Takashi; Chiba, Tsutomu; Matsuura,  
Yoshiharu; Miyamura, Tatsuo [Reprint author]  
CORPORATE SOURCE: Dep. Virol. II, Natl. Inst. Health, 1-23-1 Toyama,  
Shinjuku-ku, Tokyo 162, Japan  
SOURCE: Hepatology, (1995) Vol. 22, No. 6, pp. 1648-1655.  
CODEN: HPTLD9. ISSN: 0270-9139.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 26 Jan 1996  
Last Updated on STN: 27 Jan 1996

AB The serine proteinase of hepatitis C virus (HCV) nonstructural protein NS3 was efficiently expressed in an active form as a fused protein with oligohistidine in Escherichia coli. The recombinant fusion protein was purified to near homogeneity by affinity chromatography on a metal chelation column. Trans-cleavage activity of this protein was investigated by using the substrate NS5 protein expressed in insect cells. The purified serine proteinase trans-cleaved the partially purified NS5 protein. In contrast, the NS3 proteins with mutations at the proposed catalytic site, Ser-1165 or His-1083, lost the trans-cleavage activity. Analysis of the authentic enzyme and variants with site-directed mutations provides a useful tool for understanding the structure-function relationship of the NS3 serine proteinase. We then developed an in vivo trans-cleavage assay system by coexpression of the NS3 proteinase and the NS5 substrate in E. coli, and examined the effect of known inhibitors of serine proteinase. Inhibition of its proteolytic activity by N-p-tosyl-L-lysine chloromethyl ketone (TLCK) was observed, but only at high concentrations. The in vitro and in vivo trans-cleavage assays for NS3 serine proteinase will facilitate efficient testing for inhibitors of the replication of HCV and specific treatment for hepatitis C.

L8 ANSWER 41 OF 43 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on  
STN

ACCESSION NUMBER: 1992:307541 BIOSIS  
DOCUMENT NUMBER: PREV199294020691; BA94:20691  
TITLE: INHIBITION OF HUMAN OVINE AND BABOON NEUTROPHIL  
ELASTASE WITH EGLIN C AND SECRETORY LEUKOCYTE PROTEINASE

INHIBITOR.  
AUTHOR(S): JUNGER W G [Reprint author]; HALLSTROM S; REDL H; SCHLAG G  
CORPORATE SOURCE: UNIV CALIF SAN DIEGO, DEP SURG 8236, DIV TRAUMA, 225  
DICKINSON ST, SAN DIEGO, CALIF 92103, USA  
SOURCE: Biological Chemistry Hoppe-Seyler, (1992) Vol. 373, No. 3,  
pp. 119-122.  
CODEN: BCHSEI. ISSN: 0177-3593.  
DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: ENGLISH  
ENTRY DATE: Entered STN: 27 Jun 1992  
Last Updated on STN: 27 Jun 1992

AB The association rate constants (kon) of human, ovine, and baboon neutrophil elastase with two recombinant serine proteinase inhibitors (Eglin c, secretory leukocyte proteinase inhibitor) were compared. The association rate constant of sheep leukocyte elastase (SLE) with Eglin c is about 100 times lower (kon =  $2.2 + 105 \text{ M}^{-1} \text{ s}^{-1}$ ) than that of human elastase (kon =  $2.4 + 107 \text{ M}^{-1} \text{ s}^{-1}$ ). Baboon elastase, however, is as effectively blocked with Eglin C (kon =  $2.5 + 107 \text{ M}^{-1} \text{ s}^{-1}$ ) as human elastase. Secretory leukocyte proteinase inhibitor (SLPI) blocks the elastase of all three species with high efficiency; baboon elastase shows the highest association rate constant (Kon =  $56 + 107 \text{ M}^{-1} \text{ s}^{-1}$ ) followed by human elastase (kon =  $4.1 + 107 \text{ M}^{-1} \text{ s}^{-1}$ ) and finally sheep elastase (kon =  $1.2 + 107 \text{ M}^{-1} \text{ s}^{-1}$ ). These findings demonstrate marked differences in the inhibition kinetic properties of ovine and human elastase. Concerning a future clinical application of proteinase inhibitors, the baboon seems a more suitable model than sheep to evaluate the effects of Eglin c and SLPI, since both inhibitors block baboon and human elastase with comparable efficiency.

L8 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1990:70409 HCAPLUS  
DOCUMENT NUMBER: 112:70409  
TITLE: Cleavage of proenkephalin by a chromaffin granule processing enzyme  
AUTHOR(S): Lindberg, Iris; Thomas, G.  
CORPORATE SOURCE: Med. Sch., Louisiana State Univ., New Orleans, LA, 70112, USA  
SOURCE: Endocrinology (1990), 126(1), 480-7  
CODEN: ENDOAO; ISSN: 0013-7227  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Human proenkephalin generated by means of a recombinant vaccinia virus expression vector was used as the substrate for a putative processing enzyme obtained from bovine adrenal chromaffin granules. The adrenal enzyme successfully cleaved proenkephalin to generate low-mol.-weight enkephalins as well as other enkephalin-containing intermediates. Radioactively labeled proenkephalin prepared with this system was also cleaved; however, under identical conditions bovine proinsulin was not cleaved. These results provide support for the notion that the adrenal trypsin-like enzyme is involved in the processing of proenkephalin in vivo and demonstrate the usefulness of protein substrates prepared by expression vector systems in testing the reactivity and specificity of proposed prohormone processing enzymes in vitro.

L8 ANSWER 43 OF 43 MEDLINE on STN  
ACCESSION NUMBER: 88018671 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 2958956  
TITLE: Thromboresistance of bulk heparinized catheters in human.  
AUTHOR: Eloy R; Belleville J; Paul J; Pusineri C; Baguet J; Rissoan M C; Cathignol D; Ffrench P; Ville D; Tartullier M

CORPORATE SOURCE: Unit 37 INSERM, Bron.  
 SOURCE: Thrombosis research, (1987 Feb 1) Vol. 45, No. 3, pp. 223-33.  
 Journal code: 0326377. ISSN: 0049-3848.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: (COMPARATIVE STUDY)  
 Journal; Article; (JOURNAL ARTICLE)  
 (RESEARCH SUPPORT, NON-U.S. GOV'T)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 198711  
 ENTRY DATE: Entered STN: 5 Mar 1990  
 Last Updated on STN: 3 Mar 2000  
 Entered Medline: 16 Nov 1987

AB Bulk heparinized catheters (1 mm internal diameter) containing 10% heparin ionically bound, were tested in four human volunteers. Catheters containing 0% and 10% heparin were compared in each individual using ultrasound microflow velocimetry, permeability test, sequential determinations of activated partial thromboplastin time, heparin levels and generation of Fibrinopeptide A, beta thromboglobulin and Platelet factor 4. Although the release of heparin expressed by its anti-IIa activity is of similar range in the four individuals the release of anti-Xa activity is variable and generally of greater magnitude, suggesting a privileged migration of low molecular weight components of heparin. These antiproteasic activities of heparin are sufficient to inhibit fibrin formation and blood coagulation despite their relative inability to prevent platelet activation.

=> d his

(FILE 'HOME' ENTERED AT 14:12:43 ON 05 JUN 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:13:12 ON 05 JUN 2007

L1 39180 S SERINE (W) PROTEINASE  
 L2 8415876 S CLON? OR EXPRESS? OR RECOMBINANT  
 L3 13408 S L1 AND L2  
 L4 7251 S HUMAN AND L3  
 L5 10 S "HELA2"  
 L6 7 DUP REM L5 (3 DUPLICATES REMOVED)  
 L7 52 S L4 AND TESTIN?  
 L8 43 DUP REM L7 (9 DUPLICATES REMOVED)

=> e antalis t m/au

E1 1 ANTALIS PATRICIA T/AU  
 E2 19 ANTALIS T/AU  
 E3 208 --> ANTALIS T M/AU  
 E4 1 ANTALIS T M \*/AU  
 E5 9 ANTALIS TONI/AU  
 E6 103 ANTALIS TONI M/AU  
 E7 6 ANTALIS TONI MARIE/AU  
 E8 1 ANTALK ISTVAN/AU  
 E9 5 ANTALKI T/AU  
 E10 1 ANTALL G/AU  
 E11 1 ANTALL GLORIA F/AU  
 E12 40 ANTALL J/AU

=> s e3-e7

L9 327 ("ANTALIS T M"/AU OR "ANTALIS T M \*/AU OR "ANTALIS TONI"/AU OR "ANTALIS TONI M"/AU OR "ANTALIS TONI MARIE"/AU)

=> e hooper j d/au

E1 18 HOOPER J B/AU



E2 29 HOOPER J C/AU  
 E3 91 --> HOOPER J D/AU  
 E4 1 HOOPER J D H/AU  
 E5 197 HOOPER J E/AU  
 E6 1 HOOPER J E \*/AU  
 E7 1 HOOPER J E N/AU  
 E8 54 HOOPER J F/AU  
 E9 1 HOOPER J F G/AU  
 E10 3 HOOPER J G/AU  
 E11 1 HOOPER J G V/AU  
 E12 26 HOOPER J H/AU

=> s e3

L10 91 "HOOPER J D"/AU

=> s l9 or l10

L11 393 L9 OR L10

=> d his

(FILE 'HOME' ENTERED AT 14:12:43 ON 05 JUN 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:13:12 ON 05 JUN 2007

L1 39180 S SERINE (W)PROTEINASE  
 L2 8415876 S CLON? OR EXPRESS? OR RECOMBINANT  
 L3 13408 S L1 AND L2  
 L4 7251 S HUMAN AND L3  
 L5 10 S "HELA2"  
 L6 7 DUP REM L5 (3 DUPLICATES REMOVED)  
 L7 52 S L4 AND TESTIN?  
 L8 43 DUP REM L7 (9 DUPLICATES REMOVED)  
 E ANTALIS T M/AU  
 L9 327 S E3-E7  
 E HOOPER J D/AU  
 L10 91 S E3  
 L11 393 S L9 OR L10

=> s l11 and l1

L12 72 L11 AND L1

=> s l12 and (testin or "HELA2")

L13 2 L12 AND (TESTIN OR "HELA2")

=> d 1-2 ibib ab

L13 ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2003:42593 BIOSIS  
 DOCUMENT NUMBER: PREV200300042593  
 TITLE: DNA molecules encoding human HELA2 or testisin  
 serine proteinases.  
 AUTHOR(S): Antalis, Toni Marie [Inventor, Reprint Author];  
 Hooper, John David [Inventor]  
 CORPORATE SOURCE: Toowong, Australia  
 ASSIGNEE: Amrad Operations Pty., Ltd., Victoria, Australia  
 PATENT INFORMATION: US 6479274 20021112  
 SOURCE: Official Gazette of the United States Patent and Trademark  
 Office Patents, (Nov 12 2002) Vol. 1264, No. 2.  
<http://www.uspto.gov/web/menu/patdata.html>. e-file.  
 ISSN: 0098-1133 (ISSN print).  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 15 Jan 2003  
 Last Updated on STN: 15 Jan 2003

AB The present invention related generally to novel molecules and more particularly novel proteinaceous molecules involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel serine proteinases and a novel kinase and to derivatives, agonists and antagonists thereof. In one embodiment, the present invention provides a novel serine proteinase, referred to herein as "HELA2" or "testisin", which has roles in spermatogenesis, in suppressing testicular cancer and as a marker for cancers.

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:568908 HCAPLUS

DOCUMENT NUMBER: 129:198890

TITLE: Cloning of human serine proteinases and a kinase involved in spermatogenesis and the suppression of testicular cancer

INVENTOR(S): Antalis, Toni Marie; Hooper, John David

PATENT ASSIGNEE(S): Amrad Operations Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 168 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836054	A1	19980820	WO 1998-AU85	19980213
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9859734	A	19980908	AU 1998-59734	19980213
US 6479274	B1	20021112	US 1998-23942	19980213
AU 774591	B2	20040701	AU 2000-72539	20001228
US 2003092154	A1	20030515	US 2002-40647	20020107
PRIORITY APPLN. INFO.:			AU 1997-5101	A 19970213
			AU 1997-422	A 19971118
			AU 1998-59734	A3 19980213
			US 1998-23942	A3 19980213
			WO 1998-AU85	W 19980213

AB The present invention relates novel proteinaceous mols. involved in or associated with regulation of cell activities and/or viability. The present invention is particularly directed to novel serine proteinases and a novel kinase and to derivs., agonists and antagonists thereof. PCR cloning isolated a human cDNA encoding a novel serine proteinase, referred to herein as HELA2 or testisin, which has roles in spermatogenesis, in suppressing testicular cancer, and as a marker for cancers. Testisin is specifically expressed in the normal testis and is associated with sperm development; it is associated with tumors in non-testis cell types and testisin mRNA and protein expression is absent in testicular germ cell tumors. The testisin gene was mapped to human chromosome 16p13.3, and is organized into 6 exons and 5 introns. Two forms of testisin are provided, based on alternative splicing. The testisin gene is associated with a gene cluster of homologous genes, designated SP001LA, SP002LA, and SP003LA. An addnl. serine proteinase, designated ATC2, and a kinase designated BCON3 were also provided by PCR cloning with the same primers.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 14:12:43 ON 05 JUN 2007)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,  
LIFESCI' ENTERED AT 14:13:12 ON 05 JUN 2007

L1	39180 S SERINE (W)PROTEINASE
L2	8415876 S CLON? OR EXPRESS? OR RECOMBINANT
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L4	7251 S HUMAN AND L3
L5	10 S "HELA2"
L6	7 DUP REM L5 (3 DUPLICATES REMOVED)
L7	52 S L4 AND TESTIN?
L8	43 DUP REM L7 (9 DUPLICATES REMOVED)
	E ANTALIS T M/AU
L9	327 S E3-E7
	E HOOPER J D/AU
L10	91 S E3
L11	393 S L9 OR L10
L12	72 S L11 AND L1
L13	2 S L12 AND (TESTIN OR "HELA2")

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 2007008700 4 A1		US- PGPUB	20070419	107	Pro104 antibody compositions and methods of use
2	US 2005025555 8 A1		US- PGPUB	20051117	92	Novel compounds
3	US 7033790 B2		USPAT	20060425	490	Proteins and nucleic acids encoding same

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 2007010512 2 A1		US- PGPUB	20070510	1202	Primers for synthesizing full-length cDNA and their use
2	US 2007008700 4 A1		US- PGPUB	20070419	107	Pro104 antibody compositions and methods of use
3	US 2007008233 2 A1		US- PGPUB	20070412	179	Molecular cardiotoxicology modeling
4	US 2007005938 2 A1		US- PGPUB	20070315	18	Medical treatment of breast cancer with boric acid materials
5	US 2007002600 6 A1		US- PGPUB	20070201	24	Method of treating cancer cells to create a modified cancer cell that provokes an immunogenic response
6	US 2006028179 1 A1		US- PGPUB	20061214	33	Methods of increasing proliferation of adult mammalian cardiomyocytes through p38 map kinase inhibition
7	US 2006026992 1 A1		US- PGPUB	20061130	107	Methods of diagnosis and prognosis of pancreatic cancer
8	US 2006025787 2 A1		US- PGPUB	20061116	287	Cell lines and host nucleic acid sequences related to infectious disease
9	US 2006019494 9 A1		US- PGPUB	20060831	89	Structure of the farnesoid x receptor ligand binding domain and methods of use therefor
10	US 2006016012 6 A1		US- PGPUB	20060720	337	90 human secreted proteins
11	US 2006012876 4 A1		US- PGPUB	20060615	69	Non-steroidal farnesoid x receptor modulators and methods for the use thereof

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
12	US 2006007890 0 A1		US- PGPUB	20060413	325	Molecular toxicology modeling
13	US 2005027212 6 A1		US- PGPUB	20051208	28	Testis-specific differentiation-regulatory factor
14	US 2005025013 7 A1		US- PGPUB	20051110	71	Molecular targets of cancer and aging
15	US 2005024484 5 A1		US- PGPUB	20051103	338	90 human secreted proteins
16	US 2005003303 6 A1		US- PGPUB	20050210	28	Testis-specific differentiation-regulatory factor
17	US 2004024247 6 A1		US- PGPUB	20041202	31	Male contraceptives
18	US 2004014233 5 A1		US- PGPUB	20040722	293	Method for determining skin stress or skin ageing in vitro
19	US 2004007216 0 A1		US- PGPUB	20040415	337	Molecular toxicology modeling
20	US 2004005834 0 A1		US- PGPUB	20040325	135	Diagnosis and prognosis of breast cancer patients
21	US 2004003916 3 A1		US- PGPUB	20040226	199	Novel proteins and nucleic acids encoding same
22	US 2004003891 7 A1		US- PGPUB	20040226	266	Gene expression in biological conditions
23	US 2004003829 2 A1		US- PGPUB	20040226	621	Wound healing biomarkers
24	US 2004002328 3 A1		US- PGPUB	20040205	333	90 human secreted proteins
25	US 2004001851 3 A1		US- PGPUB	20040129	111	Classification and prognosis prediction of acute lymphoblastic leukemia by gene expression profiling

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
26	US 2004001013 6 A1		US- PGPUB	20040115	73	Composition for the detection of signaling pathway gene expression
27	US 2003022437 4 A1		US- PGPUB	20031204	104	Diagnosis and prognosis of breast cancer patients
28	US 2003014369 1 A1		US- PGPUB	20030731	35	Human testin
29	US 2003009215 4 A1		US- PGPUB	20030515	104	Novel molecules
30	US 2003005444 3 A1		US- PGPUB	20030320	333	90 human secreted proteins
31	US 2003000355 5 A1		US- PGPUB	20030102	236	90 human secreted proteins
32	US 7171311 B2		USPAT	20070130	130	Methods of assigning treatment to breast cancer patients
33	US 6989232 B2		USPAT	20060124	309	Proteins and nucleic acids encoding same
34	US 6949364 B2		USPAT	20050927	29	Testis-specific differentiation-regulatory factor
35	US 6835813 B1		USPAT	20041228	26	Testis-specific differentiation-regulatory factor
36	US 6806351 B2		USPAT	20041019	220	Secreted protein HBJFE12
37	US 6706867 B1		USPAT	20040316	434	DNA array sequence selection
38	US 6500938 B1		USPAT	20021231	65	Composition for the detection of signaling pathway gene expression
39	US 6479274 B1		USPAT	20021112	99	DNA molecules encoding human HELA2 or testisin serine proteinases
40	US 6358711 B1		USPAT	20020319	30	Antibody to human testin and methods of making and using

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
41	US 6331396 B1		USPAT	20011218	87	Arrays for identifying agents which mimic or inhibit the activity of interferons
42	US 6001594 A		USPAT	19991214	32	Human testin
43	US 5066757 A		USPAT	19911119	10	One-can heat-curable resin compositions and precoated metal
44	US 4423118 A		USPAT	19831227	7	Thickened paper coating composition



	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 2007008700 4 A1		US- PGPUB	20070419	107	Pro104 antibody compositions and methods of use
2	US 2005025555 8 A1		US- PGPUB	20051117	92	Novel compounds
3	US 2005025013 7 A1		US- PGPUB	20051110	71	Molecular targets of cancer and aging
4	US 2003013957 2 A1		US- PGPUB	20030724	93	Novel compounds
5	US 2003009215 4 A1		US- PGPUB	20030515	104	Novel molecules
6	US 6479274 B1		USPAT	20021112	99	DNA molecules encoding human HELA2 or testisin serine proteinases

	L #	Hits	Search Text
1	L1	1329 0	serine adj protease\$2
2	L2	269	HELA2 or testin
3	L3	3	l1 same l2
4	L4	9736 08	clon\$3 or express\$3 or recombinant
5	L5	44	l2 same l4
6	L6	6839	ANTALIS HOOPER
7	L7	6	l2 and l6